SONY

3002751
SONY BDA
LBTV925CD

3-786-912-51(1)

Stereo Component System

Operating Instructions

photocopy for service-use only

COMPACT disc DIGITAL AUDIO

LBT-V925CD

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTICE FOR THE CUSTOMERS IN THE UNITED KINGDOM

The mains lead plug of this apparatus is 2-pin type designed to be connected only to other apparatus equipped with a suitable socket outlet.
If the plug cannot be used in this way, cut off the plug and fit an appropriate one as follows:

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING

To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be discarded.

DANGER

Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

Note

This appliance conforms with EEC Directives 76/889 and 82/499 regarding interference suppression.

CLASS 1
LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

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System Component Composition

The LBT-V925CD comprises the following components.

Components	Model name
Tuner	ST-V925E
Preamplifier	TA-V925EE
Power amplifier	TA-V925NE
CD player	CDP-V925E
Cassette deck	TC-V925E
Turntable	PS-V901
Speaker system	APM-181ES

For the operation of PS-V901 turntable and APM-181ES speaker system, see the operating instruction of those equipments.

Precautions

On safety

- Operate the unit only on 240V AC, 50 Hz.
- The stereo system is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the stereo system itself has been turned off.
- Unplug the stereo system from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.
- Should any solid object or liquid fall into the component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.

If you have any question or problem concerning your stereo system, please consult your nearest Sony dealer.

Features

Preamplifier

Digital drive preamplifier for creating vibrant sound
The preamplifier features a Digital Parametric Equalizer, Digital Presence Surround, and Digital Dynamic Sound. Enabling you to mold the musical sound to your individual taste. Also, you can easily adjust the music to your taste by selecting from various patterns (up to 200) which combine these three functions and are stored in the preamplifier's preset memory.

Digital parametric equalizer for sound control
This function employs digital processing to enable you to adjust the quality of the sound by raising and lowering the levels of specific frequency ranges.

Digital presence surround which allows you to select the surround system to match the music genre
This function features three types of surround – music, movie, and simulated – to allow you to match the surround system with the genre of the sound source and reproduce the sound as if you were actually experiencing it in a concert hall or movie theater. In addition, the amount of reverberation can be varied in order to reproduce sound with a sense of presence as if it were being listened to in a concert hall.

Digital dynamic sound for providing low-volume sound with a feeling of power
When listening at low volume levels, this function raises the level of hard to hear sounds and provides the sound with a good overall balance.

Abundant input and output jacks for handling digital transmission and a wide variety of AV equipment
This preamplifier is provided with optical inputs for connecting up to 2 digital components such as CD players and DAT decks, and video inputs for connecting up to 3 video components such as VTRs and video disc players.

Power Amplifier

Independent power amplifier
The power amplifier and the preamplifier are designed as independent units in the amplifier section to ensure high-quality digital sound.

80W + 80W high-power output
Plenty of speaker-driving power with power to spare.

Features

CD Player

Custom file function for facilitating disc management
With this feature, you can file music programs, disc names, and indexes, enabling you to recall programs at any time.

1-20 numeric buttons and >20 button for quick tune selection
With these buttons, you can directly specify the number of a desired tune or track.

Music calendar for providing playback status information at a glance
The track number of the currently playing tune or programmed tune can be seen at a glance.

Time edit function for facilitating tape-making
With this function, you can automatically create a music program which optimally matches the tunes on a CD with the tape recording time.

Optical digital transmission system for producing high sound quality
This CD player employs a digital transmission system which uses optical fiber cables to maintain sound purity.

Cassette Deck

The Dolby HX PRO* system which improves the linearity of the tape's high-range response during recording.

B and C type Dolby NR* system to reduce tape hiss noise.

Synchro start function for facilitating recording from compact disc
This function allows recording from compact disc to be started and stopped by only operating the cassette deck.

Fade edit recording function for making tapes without abrupt mid-tune breaks
When recording from compact disc, this function automatically fades out the tune at the end of the tape and re-records interrupted tunes.

Preamplifier-processed sound recording
Sound can be recorded after it is processed by the equalizer, surround system, and/or dynamic sound system.

CCLA function for automatically determining the recording level
The recording level is computer adjusted to optimally match the tape.

* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol ⧈ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

Tuner

A quartz locked digital synthesizer system allows precise tuning. A total of 30 FM/AM stations can be preset in 3 memory pages (A, B and C).

Others

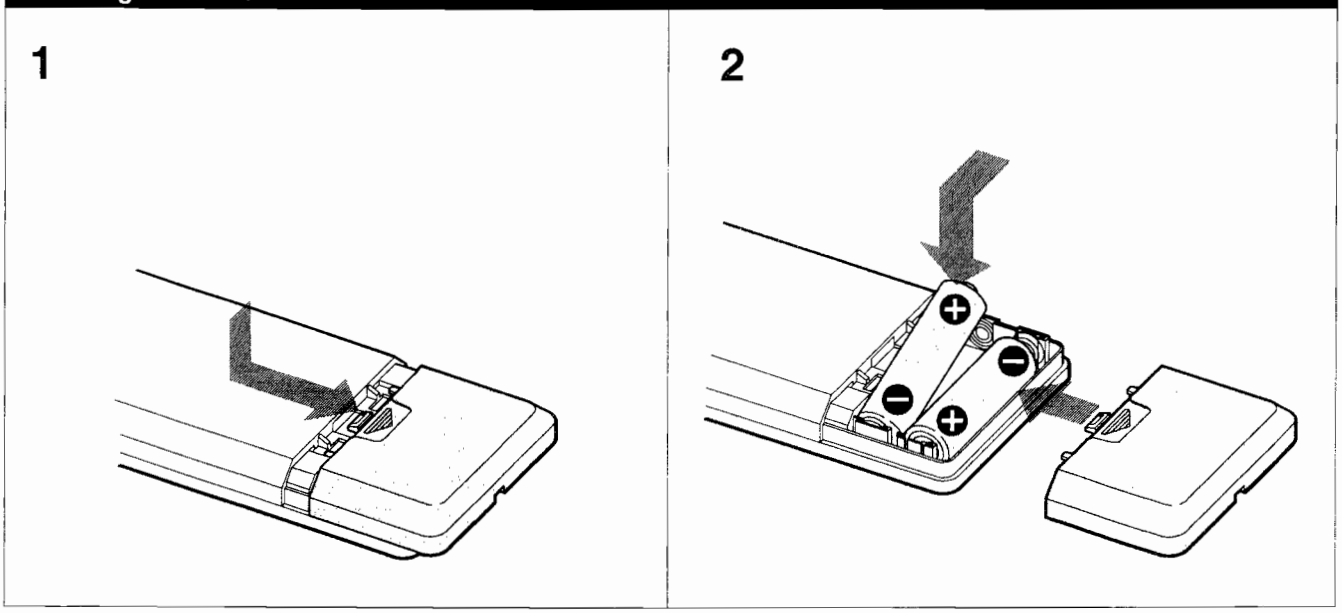
- Demo mode for automatically demonstrating various system functions.
- Remote control unit for providing free and unrestricted control of the system.

Installation

Notes on Installation

- To prevent internal heat build-up, place the unit in a location with good air circulation. Do not place it on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not install the unit in a location:
  - near heat sources
  - subject to direct sunlight, mechanical vibration or shock
  - exposed to rain, moisture, dirt or dust.

Installing Batteries



Install two R6 (size AA) batteries in the supplied remote commander for remote control operation.

Battery life
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries.
When the batteries are exhausted, the commander will not operate the unit. In this case, replace the batteries with new ones.

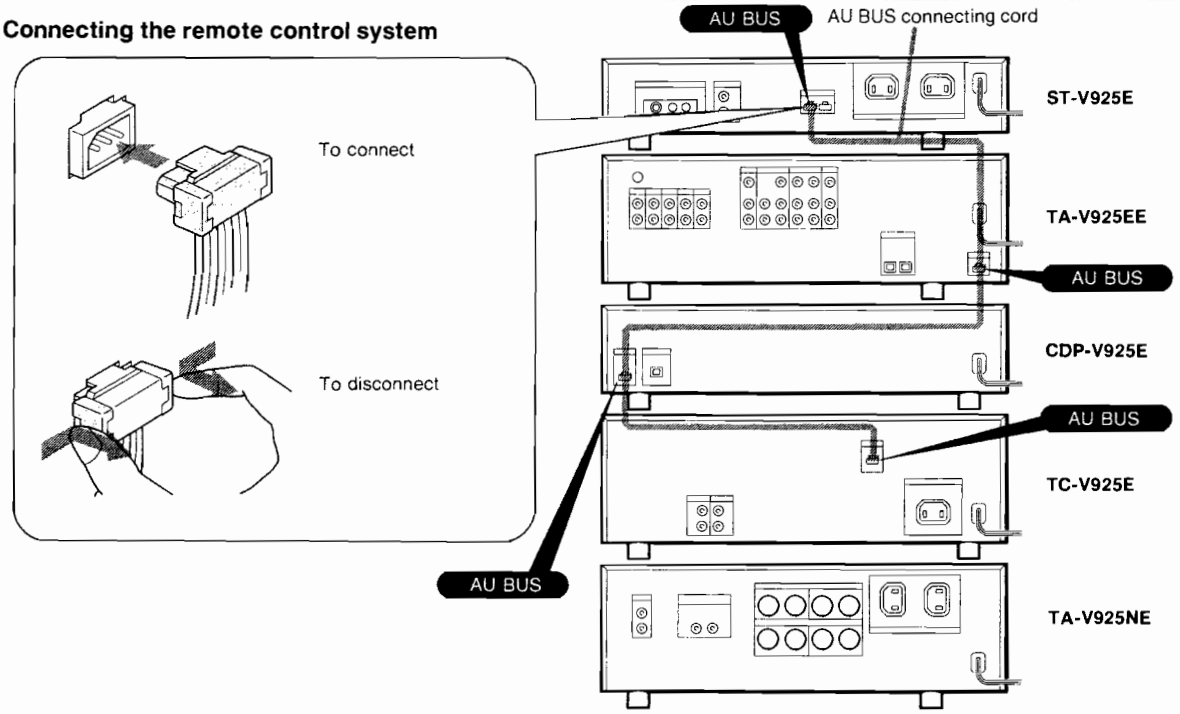
To avoid battery leakage
When the commander is not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

Connections

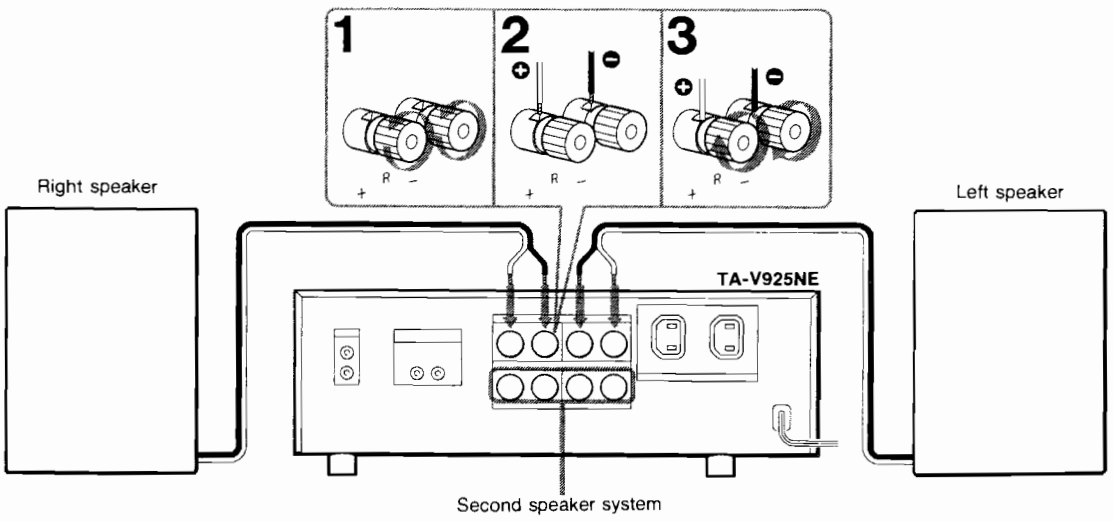
Notes on Connection

- Connect the AC power cord last. Make sure the power switch is off.
- Cord plugs and jacks are color coded. Red plugs and jacks are for the right channel (R) and white ones are for the left channel (L).
- Fully insert cable connectors into jacks. Loose connections may cause hum or noise.

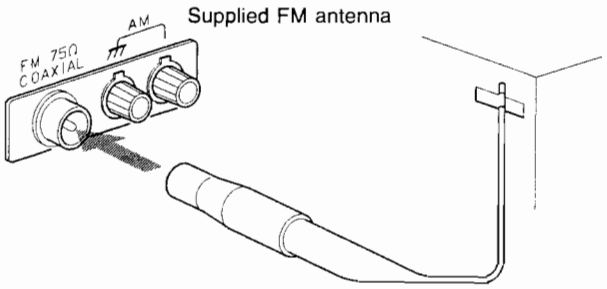
❶ Connecting the remote control system



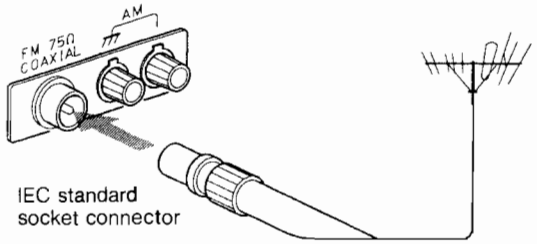
❷ Connecting the left and right speakers



❸ Connecting the FM antenna

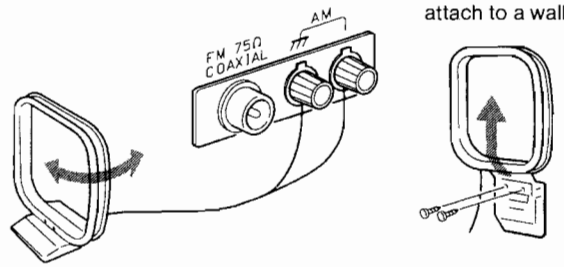


For better reception



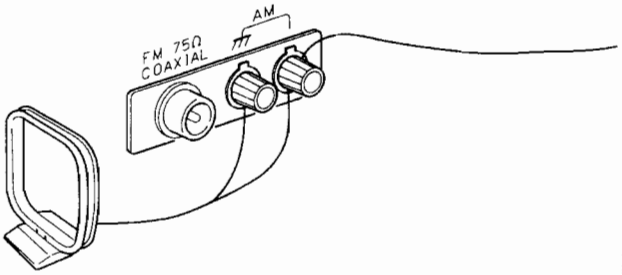
❹ Connecting the AM antenna

If necessary, attach to a wall



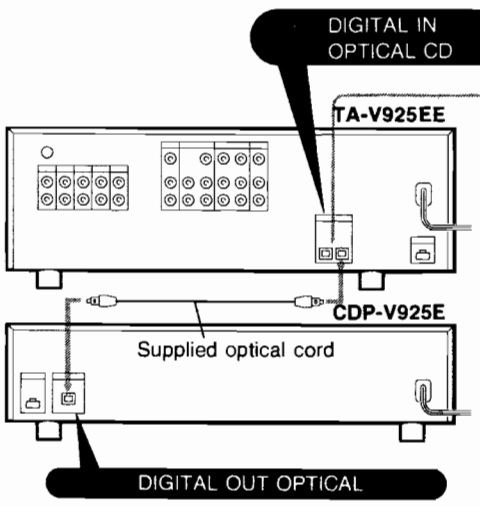
For better reception

Extend a 6- to 15-meter insulated wire out of doors.



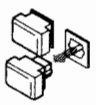
❺ Connecting the CD player

DIGITAL IN automatically detects and adjusts to the sampling frequency (32 kHz, 44.1 kHz or 48 kHz) of the digital source connected.



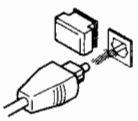
1

Remove the protecting plug.



2

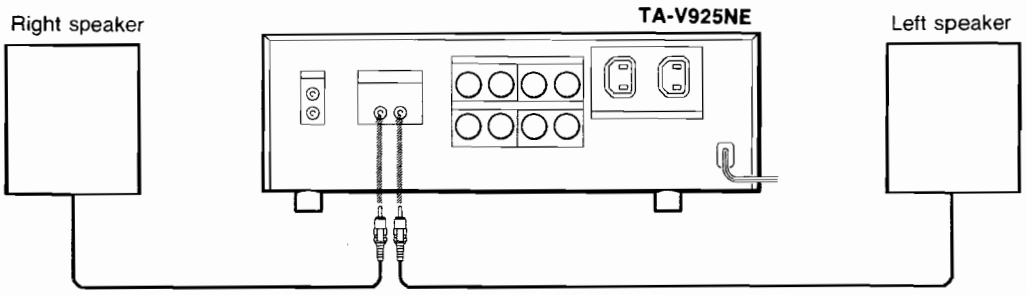
Insert the plug.



Notes on the digital optical cord

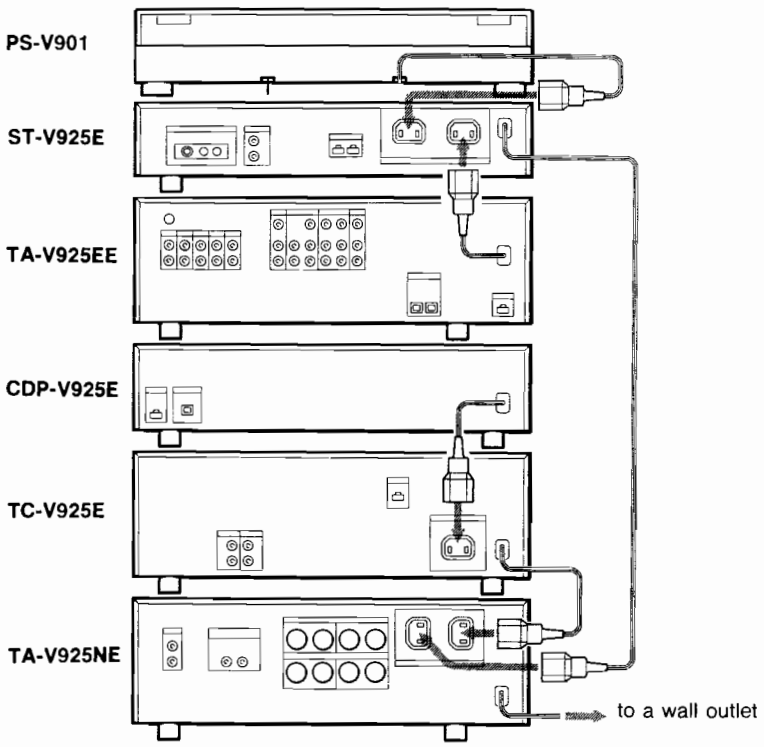
- Do not bend the cord. Be careful especially while connecting the cord.
- Make a circle of more than 15 cm (6 in.) in diameter when storing the cord.
- Insert the protection plugs in the jacks if the cord is not connected.
- Make sure that the plugs and the jacks are clean.

⓫ Connecting speakers for surround sound



Be sure to connect both left and right speakers. Sound does not come out from the surround speakers when only one speaker is connected.

⓬ Connecting the AC power

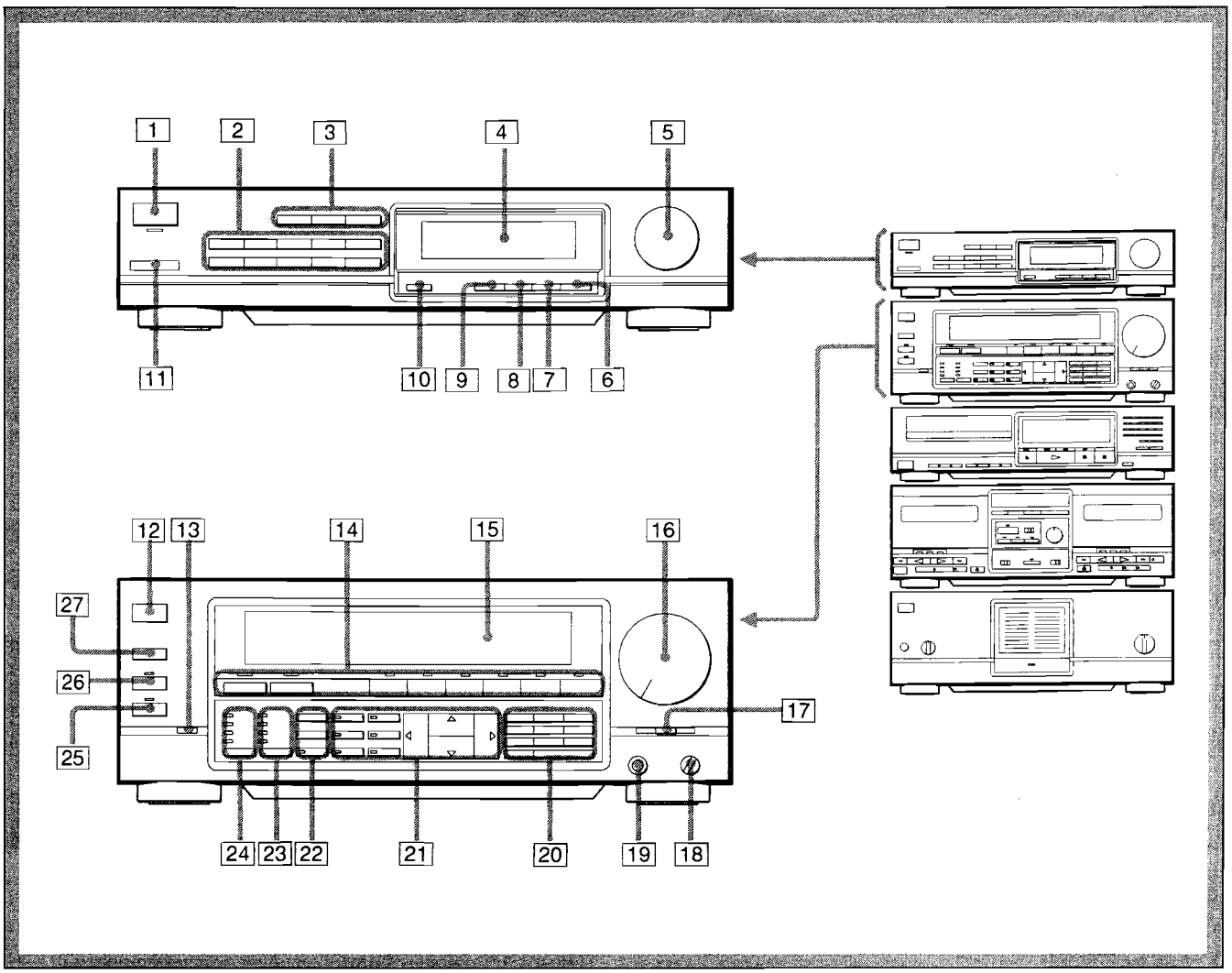


The unswitched socket outlet remains live, independent of the power switch setting, at all times when the unit is connected to an AC power supply.
Be sure to connect the AC power cord of another audio component whose power consumption is less than 200 watts.

CAUTION
Do not connect any electrical home applicance, such as an electric iron, fan, TV or other high-wattage appliance to the AC OUTLET.

If you operate your tuner with the CD player turned on:
Noise may interfere with radio reception. Therefore, always turn off the power to the CD player when it is not in use.

Parts Identification



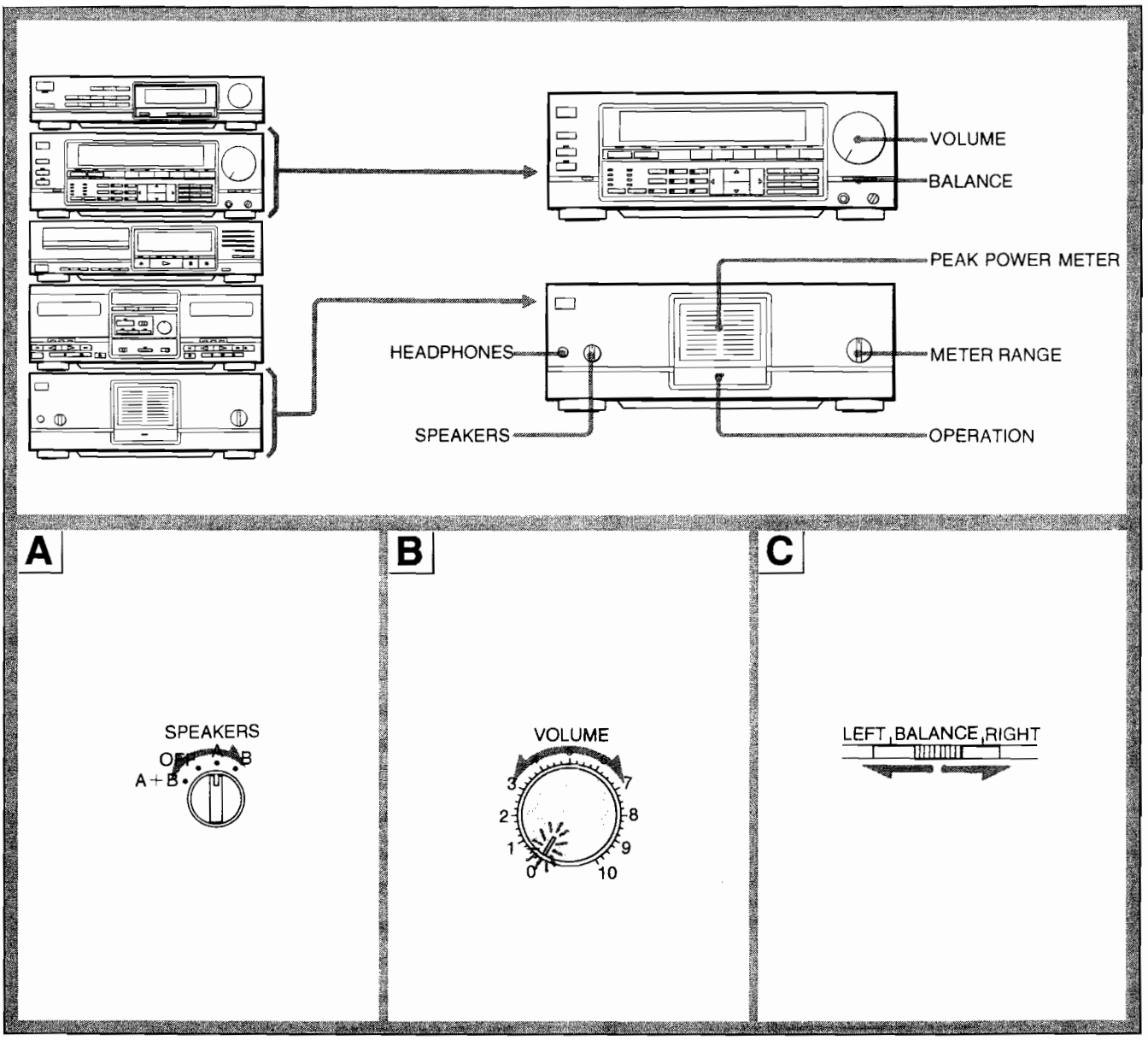
Tuner

1 POWER switch
2 PRESET STATIONS buttons
3 SHIFT buttons
4 Display window
5 TUNING knob
6 PRESET/FREQUENCY switch
7 MEMORY SCAN button
8 AUTO (automatic) TUNING button
9 MEMORY button
10 BAND selector
11 Remote control sensor

Preamplifier

12 POWER switch
13 CLEAR button
14 Function buttons and indicators
15 Display window
16 VOLUME control
17 BALANCE control
18 MIC (microphone) LEVEL control
19 MIC (microphone) input jack
20 USER MEMORY buttons
21 Digital CONTROL MODE buttons
22 Digital Parametric EQUALIZER curve operation buttons
23 DIGITAL DYNAMIC SOUND selector and indicators
24 DIGITAL PRESENCE SURROUND selector and indicatos
25 DIGITAL EFFECT switch and indicator
26 EQUALIZER RECORDING switch and indicator
27 DISPLAY button

Audio Adjustment



Selectings the Speaker System A

This amplifier provides for two speaker systems – system A and system B – which can be selected separately or simultaneously using the SPEAKERS selector.

To drive speaker system A: Set to A.
To drive speaker system B: Set to B.
To drive both speaker systems A and B: Set to A + B
For private listening with headphone connected to the HEADPHONES jack: Set to OFF.

Note: Speaker systems A and B are series connected. No sound will be heard if SPEAKERS selector is set to A + B when only one speaker system is connected.

Volume Adjustment B

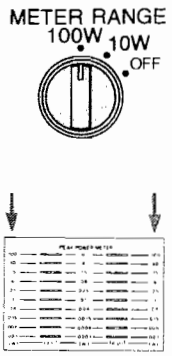
Turn the VOLUME control clockwise to increase the volume. Turn it counterclockwise to decrease the volume.
Before turning ON the power, turn the VOLUME control fully counterclockwise to avoid damage to the speakers.

Balance Adjustment C

Adjust the BALANCE control to correct stereo imaging when the speaker position is not symmetrical.

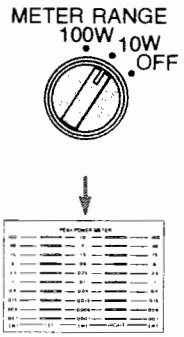
To Make the Power Amplifier Peak Power Meter Easy to Read

When listening at high volume levels
Set the METER RANGE control to the 100W position.



Peak power is indicated by scales on both sides of the meter.

When listening at low volume levels
Set the METER RANGE control to the 10W position.



Peak power is indicated by the scale in the center of the meter.

To turn off the meter display
Set the METER RANGE control to the OFF position.

To make fine adjustments to the quality of the sound
Make adjustments using the equalizer, dynamic sound, and surround (see page 53).

To record sound processed by the preamplifier
You can record sound after it has been processed by the equalizer, dynamic sound, and/or surround (see page 39).

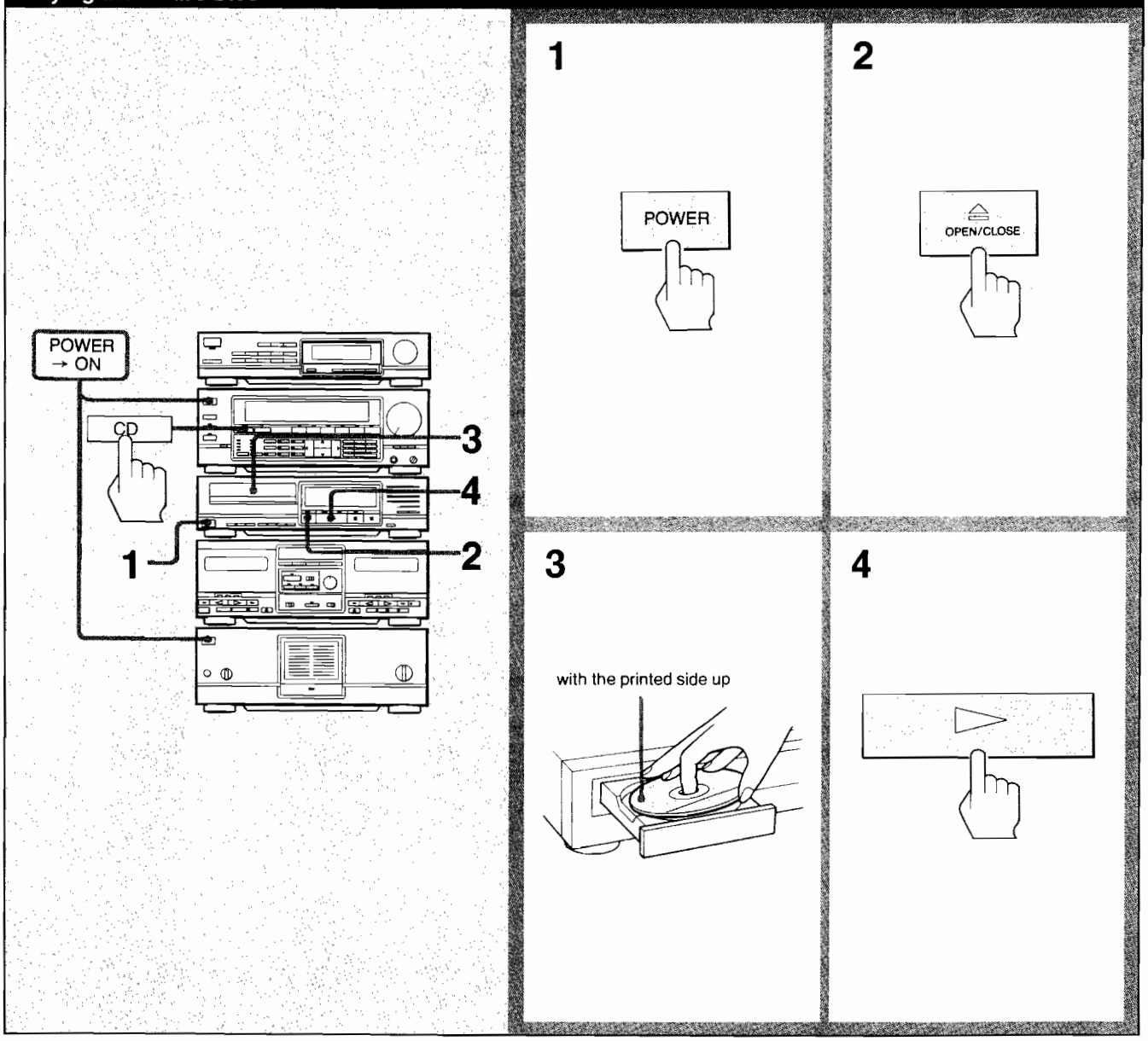
When the OPERATION indicator is green
The system is operating normally.

When the OPERATION indicator is red
The OPERATION indicator will light up red for a few seconds after the power is turned on or when an abnormality occurs. To protect the speakers. No sound is output when the indicator is red.

Playing a Disc

Before playing a disc, turn on the amplifier and set the input selector to the CD player position.

Playing the Entire Disc



To stop play

To stop for a moment during play, press ❚❚.
Press again to resume play.
To stop play, press ■.
To stop play and take out the disc, press ⏏.

If "SHUFFLE", "PGM", "SINGLE", or "C.INDEX" is displayed in the window

Press CONTINUE/SINGLE.

If "DISC/MEMO" appears in the window

There is no disc in the tray.

To play an 8cm (3-inch) CD

Place it on the inner circle of the tray. If the disc is provided with an adaptor, first remove it. Do not put a normal CD (12cm/5-inch) on top of an 8 cm CD.

To display the total number of selections and total playing

In step 4, press ⏏ instead of ►.

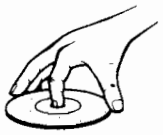
If you turn on the power with a disc in the tray

Play begins automatically from the beginning of the disc. By connecting a commercially available timer, disc play can be started at any desired time.

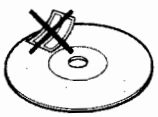
Caution on adjusting volume
Do not turn up the volume while listening to a portion with very low level signals or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.

Notes on handling discs

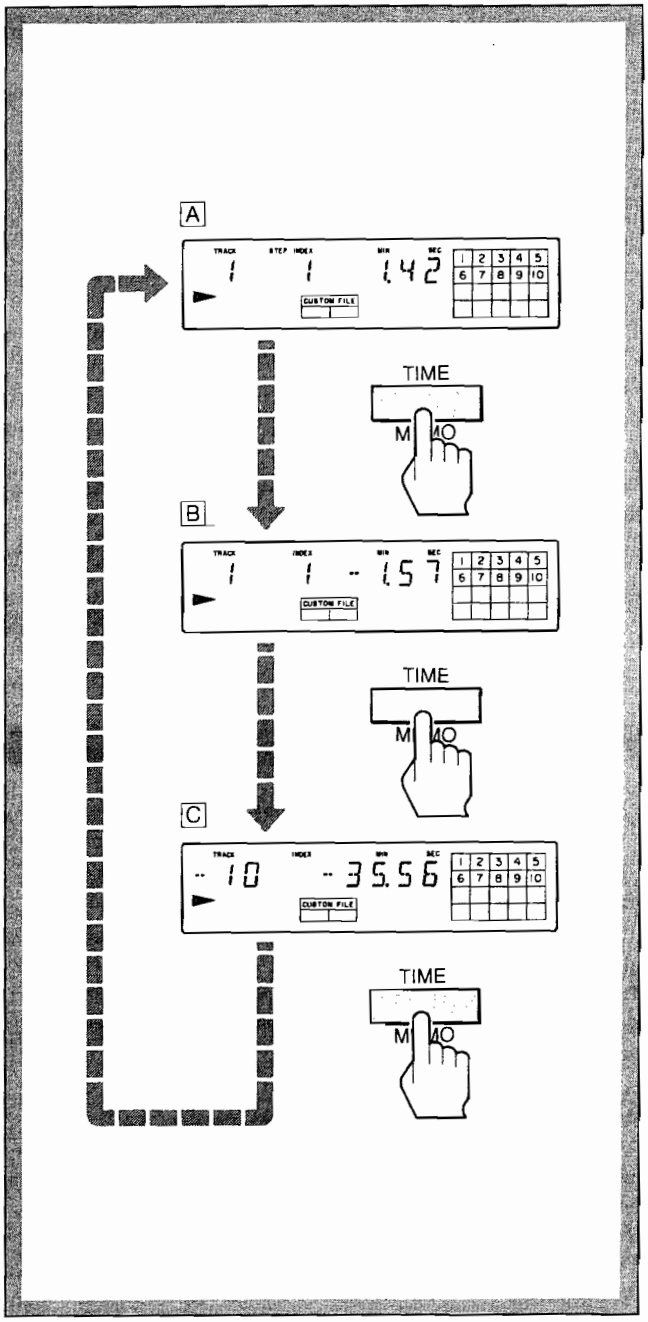
- To keep a disc clean, handle the disc by its edge. Do not touch the surface.



- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as there can be a considerable rise in temperature.
- After playing, store the disc in its case.



Information display

Each time you press TIME/MEMO during play, the display changes to give you the following information.

A Elapsed playing time
B Remaining time in a selection
If the current selection number is over 20, "----" is displayed.
C Remaining time and number of tunes on the disc

If you have stored a disc memo
The stored disc memo will be displayed, following the display of the remaining time of the disc.

Locating a Particular Selection

You can locate the beginning of a desired selection during play or pause.

To locate sequentially

To locate the beginning of the current selection or a preceding selection

- Press ⏮ as many times as required.
- Keep ⏮ pressed to skip selections.

To locate the beginning of a succeeding selection

- Press ⏭ as many times as required.
- Keep ⏭ pressed to skip selections.

To locate directly

Press one of the numeric buttons (1 to 20) to enter the desired selection number.
If the selection number is greater than 20, use the >20 and 1 to 10 buttons. 10 functions as the figure 0.

e.g. To play from selection No.22 Press >20 2 2
To play from selection No.30 Press >20 3 10

Locating a Particular Point in a Selection

You can locate a particular point on the disc during play.

To search quickly while monitoring the sound

To go forward at high speed

Keep ⏩ pressed during play and release at the desired point.

To go backward at high speed

Keep ⏪ pressed during play and release at the desired point.

To search quickly by observing the display

Press ⏸, then keep ⏪ or ⏩ pressed. The search speed will increase, but there will be no sound. Find the desired point by observing the display.
Press ⏸ again at the desired point.

When OVER is displayed

If you continuously press ⏩ at the end of the disc, OVER appears in the window. Press ⏪ or ⏮ to return the indication to normal.
If you continuously press ⏪ at the beginning of the disc, play begins automatically from the first selection.

Inserting a Blank Space between Selections – Auto Space

You can insert a 3-second blank space between each selection. The blank space enables you to locate selections when using a tape deck with an automatic selection search function.

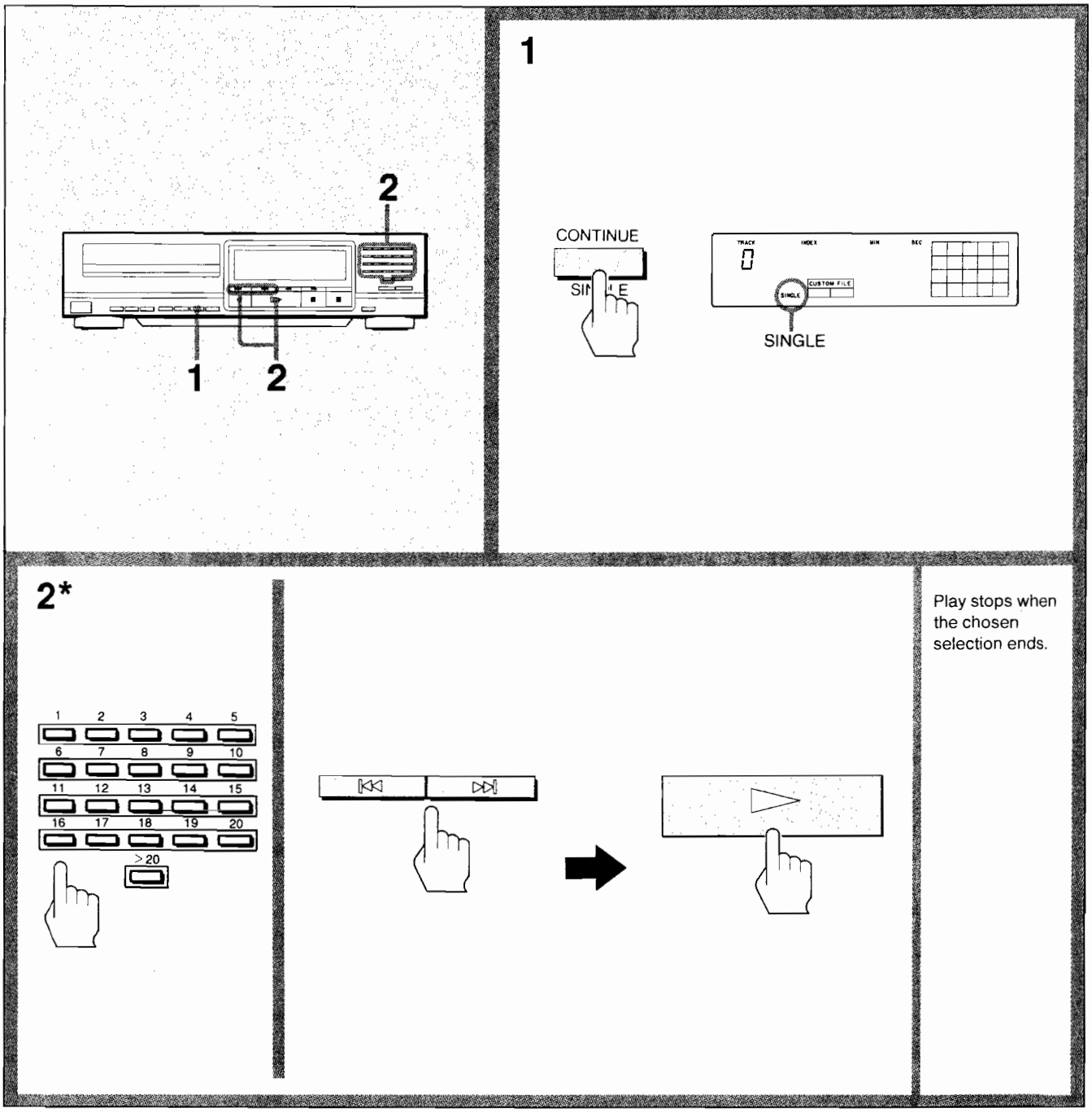
Before starting play, press AUTO SPACE so that "AUTO SPACE" is displayed in the window.
A blank space of approximately 3 seconds will be inserted between each selection.

To cancel the auto space function

Press AUTO SPACE so that "AUTO SPACE" disappears from the window.

Playing a Single Selection – Single Play

You can play just one selection and then stop instead of playing the entire disc.

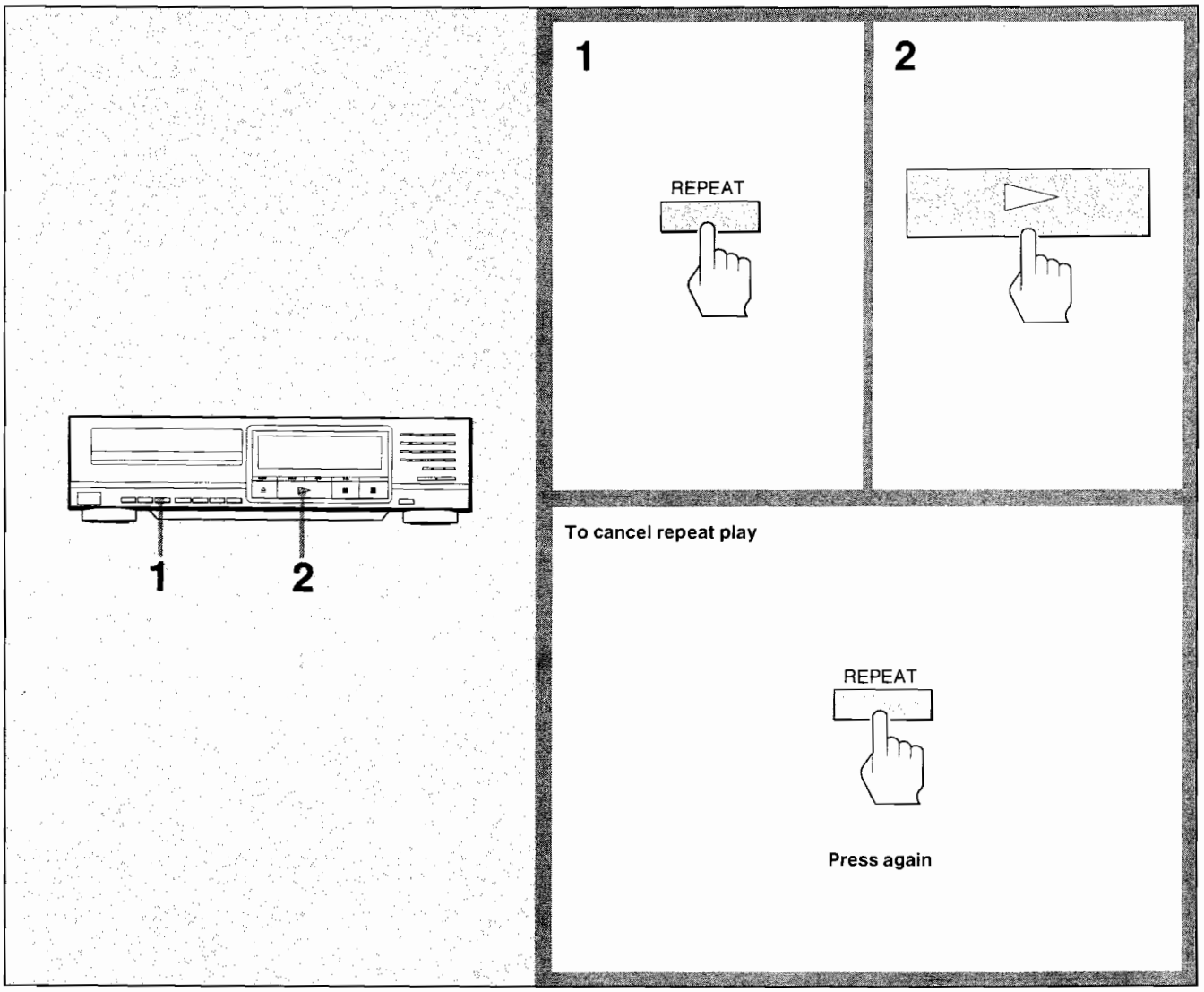


* To choose a selection number over 20, see page 18.

To cancel single play
Press CONTINUE/SINGLE again.

Playing Repeatedly – Repeat Play

With the repeat function, selections can be repeated in the current play mode (entire disc play, single play, program play, or shuffle play). In addition, the section between two adjacent custom indexes can be repeated.



You can press REPEAT before or during play.

In entire disc play mode:
All selections on the disc will be repeated.

In single play mode:
The selection being played will be repeated.

In program play mode:
The programmed selections will be repeated in the programmed order.

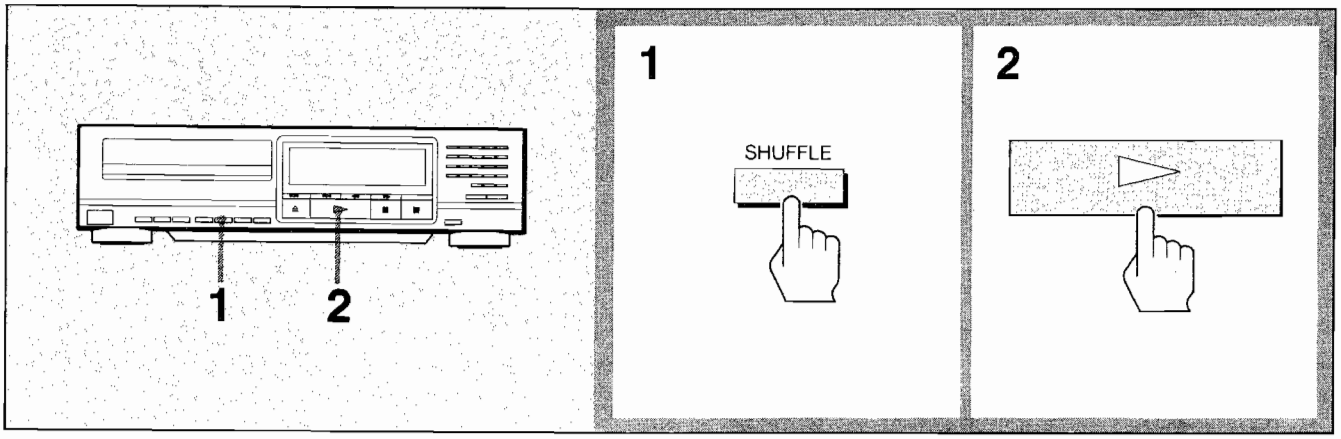
If you designate repeat play during delete shuffle play
When the selections you choose end, repeat play of all the selections will begin.

In shuffle play mode:
All selections will be repeated in random order. When all the selections have been played, play will restart in another random order.

Between two custom indexes:
The section between the specified index point and the adjacent index point will be repeated.

Playing in a Random Order – Shuffle Play

You can have the selections played in a random order.
The unit will play all the selections, or just the selections you desire.



To stop playing
Press ■.

To cancel shuffle play
Press CONTINUE/SINGLE and return to the normal playing mode.

To play only the desired selections in a random order – Delete Shuffle Play
Delete the undesired selections before or during play.

To delete a selection, press the numeric button for that selection. "OFF" will be displayed in the window. You cannot delete a selection which is being played. To choose a selection number over 20, see page 18.

To restore a selection which you have deleted, press the numeric button for that selection. "ON" will be displayed in the window.

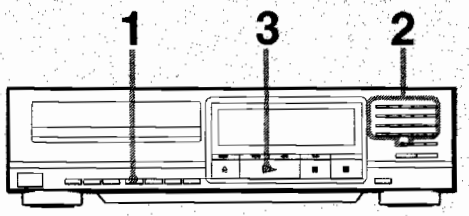
When delete shuffle play ends
The unit returns to the shuffle play mode for all selections.

To go to the next programmed selection
Press ▶▶|. To return to the beginning of the selection being played, press |◀◀.

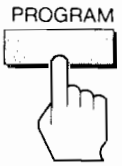
To check the remaining time of the selection being played
Press TIME/MEMO once; press once more to return to the initial display. The total remaining time will not be displayed.

Playing in a Desired Order – Program Play

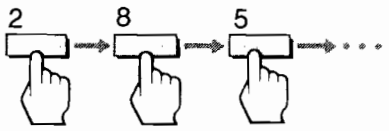
You can create a program by designating up to 20 selections in the order you want them to be played. The unit will play the disc according to your program.

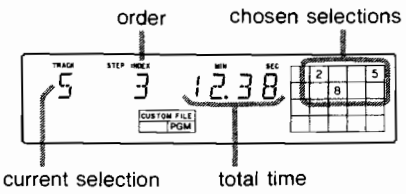


1

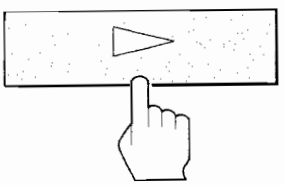


2 Press selection numbers in the desired order.*





3



* To choose a selection number over 20, see page 18.

To stop playing
Press ■.

To repeat program play
Press REPEAT.
You can play the same program repeatedly as long as you do not cancel program play or erase the program.

To cancel program play
Press CONTINUE/SINGLE and return to the normal playing mode.
The program will be erased.

To erase the entire program
Press ■ once during stop mode; twice during play.
The program is also erased when you turn off the unit.

To create a program for editing a tape

You can insert a pause in your program. Use this function to make a program for both sides of the tape at one time.

1 Program the selections for side A.
2 Press ❚❚. "P" will be displayed and the total playing time will be reset to 0.
3 Program the selections for side B.

When you start playing, the selections for side A will be played and then the unit will pause. Set the tape to the beginning of side B, then press ❚❚. The selections for side B will be played.

To check your program

Each time you press CHECK, the selection number and total playing time will be displayed in the programmed order. The last selection will be indicated with the display "END".
To return to the initial display, press CHECK once more.

To change your program

You can make the following changes before starting play.

To erase the last selection, press CLEAR.
Each time you press CLEAR, the last selection in the program will be erased.

To add a selection to the end of the program, just press the numeric button for that selection. You can add a selection also during play or pause.

To delete a selection, press CHECK repeatedly until the undesired selection is displayed. Then press CLEAR.

To change the order, press ■ during stop mode to erase the program. Then repeat the programming procedure from the beginning.

To adjust the blank spaces between selections

In a program, if you do not change the order of selections, the spaces between those selections remain the same as on the disc. Otherwise, the spaces are shortened to 1 second. You can make all the blank spaces 3 seconds long. See page 18 for details.

If "---" is displayed instead of the actual time

– you have programmed a selection number over 20.
– the total time has exceeded 100 minutes.

To check the remaining time

Press TIME/MEMO once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.
If you have inserted a pause, the display shows the remaining number of selections and time until the pause.
If you have programmed a selection number over 20, "---" is displayed instead of the actual time.

To record the specified selections in the desired order, refer to the "Program Edit" section on page 45.

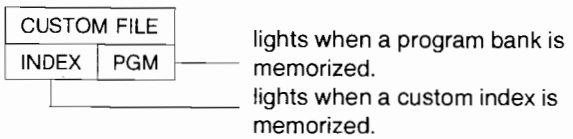
On Custom Files

The CD player incorporates a memory in which you can store three types of informations called "custom files".

Three custom files you can store in memory

Disc memo	A comment of up to 10 letters, which you can assign to each individual disc. (page 26)
Program bank	A programmed playing order you store in memory for a disc, so that the disc can always be played in a fixed order. (page 25)
Custom Index	You can assign up to 10 custom indexes to any desired position on the disc. If you assign a custom index to a position on a disc, you can easily locate the position during play, or enjoy repeat play between two adjacent custom indexes. (page 28)

What are these indications?



What is this indication?

FULL This indication appears when FILE is pressed but no custom file can be memorized for the disc currently loaded in the player. To make a custom file for the disc, clear the custom file of another disc.

Before using custom files

Press ERASE and FILE together before depressing the power switch.
This is for clearing the memory (resetting).

How many discs can be assigned custom files?

You can assign custom files to up to 227 discs.
- A disc memo can be given to a disc which already has a program bank or custom indexes.

Two discs' worth of memory is required:
- When a disc memo, a custom index and a program bank are memorized for one disc at the same time.
- When more than 8 custom indexes and a disc memo are memorized at the same time.
- When a custom index and a program bank are memorized at the same time.

Where are custom files memorized?

Custom files are memorized not in the disc but in the player's memory. Therefore, you can't enjoy custom files with other players without memorizing the custom files again. Custom files are retained for approximately 1 month without an AC power supply.

To check the contents of the custom files

Press FILE RECALL ("DISC/MEMO" is displayed) without the disc inserted. Each time you press FILE RECALL, the contents of the custom files and the items of each column of CUSTOM FILE / INDEX / PGM about the disc are displayed. If you press FILE RECALL when the last disc's information is displayed, END is displayed and returns to "DISC/MEMO" after a few seconds.

To clear all custom files for a disc

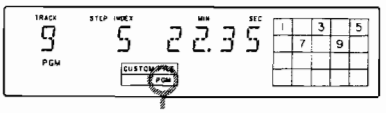
Without the disc inserted, press FILE RECALL so that the custom files to be cleared appear, and press the ERASE key.
FILE CLR appears on the display.

Keeping the Program in Memory – Program Bank Function

Memorizing a Program

After programming selections, you can keep the program memorized, so that the disc is always played in the fixed order. The memorized program is called a "program bank". You can assign one program bank for one disc.

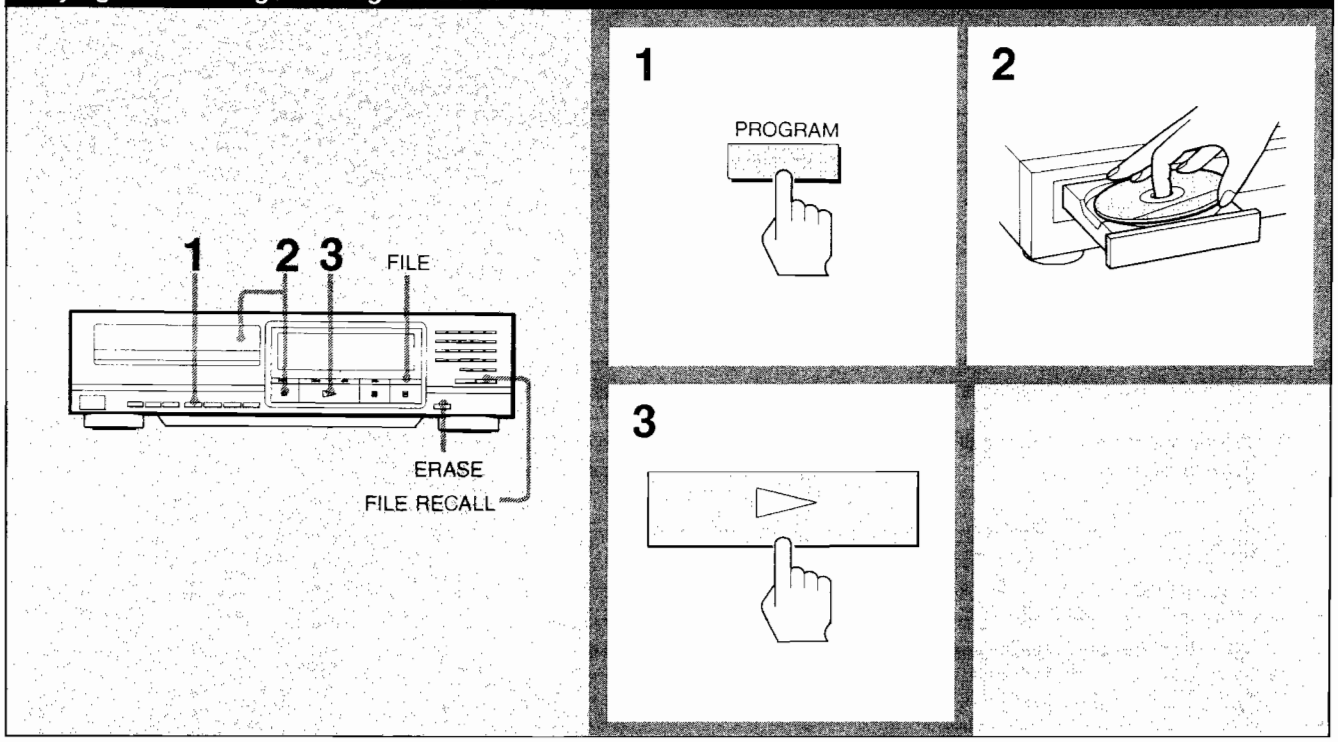
1 Program the selections as desired (page 28).
2 Press FILE.



Lights

The program is memorized in the program bank.
Only one program bank can be made for each disc.

Playing a Disc Using the Program Bank



Clearing the Program Bank

1 Put the disc whose program bank is to be cleared in the player.
2 Press FILE RECALL.
3 Press ERASE.
"PGM" goes out, and the program bank is cleared.

To play a disc having the program bank in other modes

1 Put the disc in the disc compartment.
2 Set the player in the desired play mode.
3 Press ►.

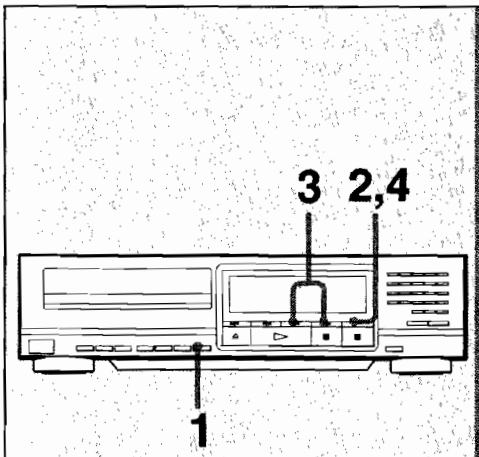
To play the selections in another program without clearing the program bank

1 Put the disc in the disc compartment.
2 Press PROGRAM.
3 Program the selection in the desired order.
4 Press ►.

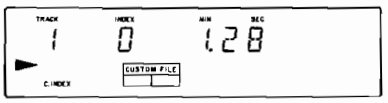
Selections are played in the order programmed at step 3.
A program bank that has already been memorized won't be erased.
(Press FILE RECALL to check the program bank.)

Giving a Disc Indexes as You Want – Custom Index Function

A custom index is a special index that can be assigned to any desired position on a disc. If you assign custom indexes to various positions on a disc, you can easily locate the positions during play, or enjoy repeat play between two adjacent custom indexes.



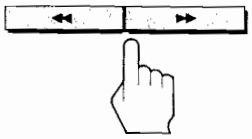
1 During play:



2 Where you want to assign a custom index:

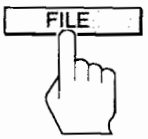
The portion for 3 seconds from the point where you pressed FILE is played repeatedly (rehearsal play).

3 Adjust the repeat start point.



Press ▶▶ to shift the repeat start point forward and ◀◀ to shift it backward.
Pressing ◀◀/▶▶ 7 times shifts the point by approximately 1 second.

4 After making adjustment:



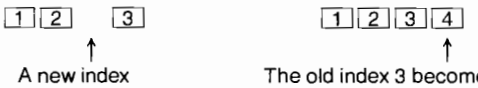
The custom index is assigned to the repeat start point.

5

You can assign custom indexes to up to 10 positions by repeating steps 2 to 4.

If a new custom index is assigned to a position preceding another index

Previously existing indexes will be shifted as follows.
Example: If you assign a new index between 2 and 3.



If you press FILE in the pause mode

The rehearsal play is not made and the custom index is assigned immediately at the position where FILE is pressed.

To release rehearsal play

Press CLEAR. Normal play is resumed.

What is this indication?

CUSTOM FILE	
INDEX	

This indication appears when a custom index has already been memorized for the disc.

Playing from a Desired Custom Index

1 Press C. INDEX.
2 Press the desired numeric button 1 through 10.

Clearing Custom Indexes

1 Press C. INDEX and C. INDEX appears.
2 Press CHECK.
Each time you press CHECK, an index number blinks. Select the index number you want to delete.
3 Press ERASE while index number blinks.

Repeating the Portion between Two Custom Indexes

During play using custom indexes, you can repeat the desired portion between any two adjacent custom indexes.

1 Press C. INDEX twice so that "C. INDEX" SINGLE is displayed in the window.
2 Press REPEAT.
3 Press one of the numeric buttons 1 to 10 for the starting point of the repeat play.

The portion between the custom index designated as the starting point and the next custom index is played repeatedly.

To cancel repeat play between custom indexes, press REPEAT.

To change the play mode during play using custom indexes
During play using custom indexes (in other words, while the music calendar is not displayed), the play mode switches from continuous play to single play and vice versa each time C. INDEX is pressed.

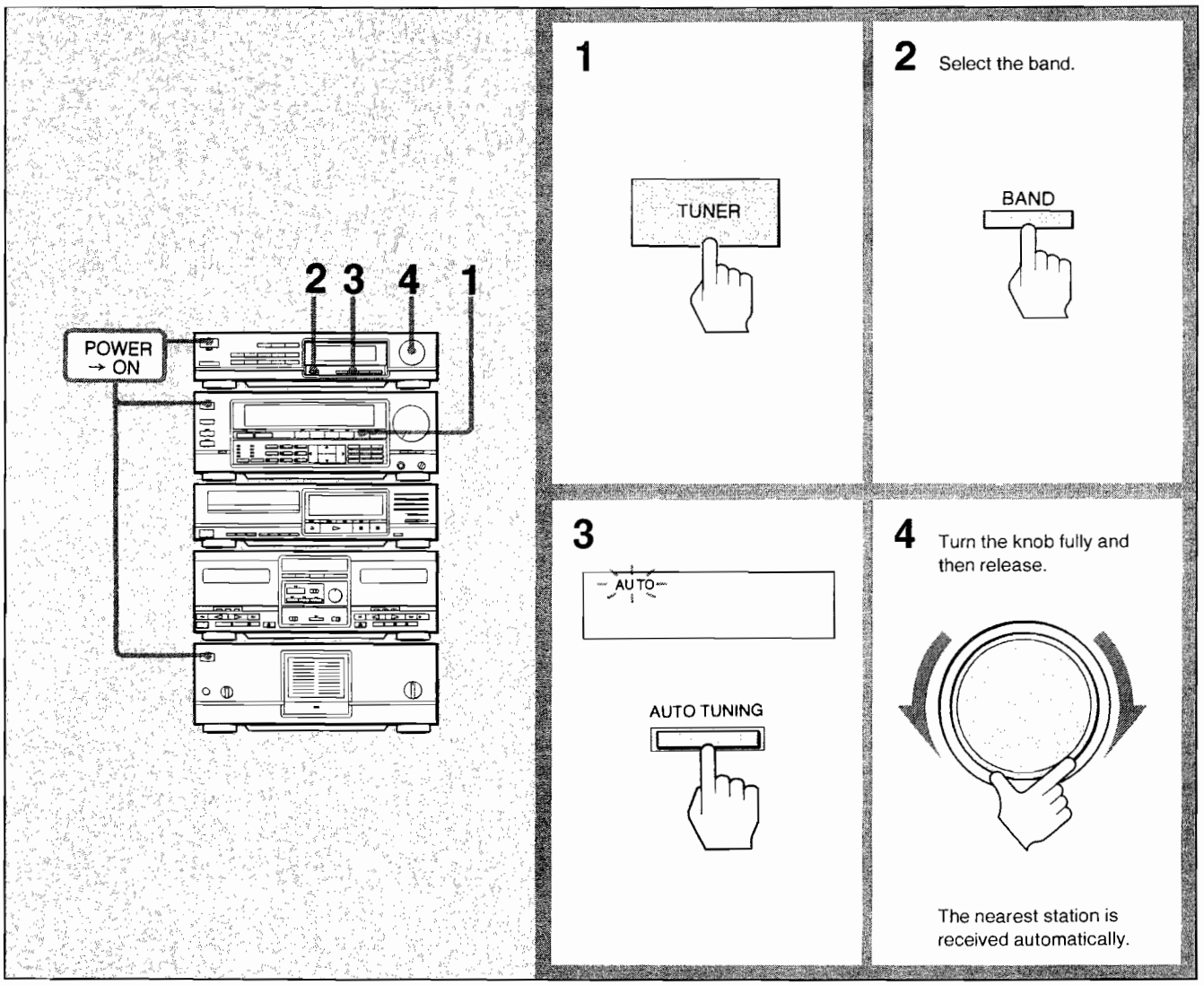
To exit custom index play
Press CONTINUE/SINGLE, PROGRAM or SHUFFLE. The player enters the corresponding mode.

Discs with the (IN•DEX) ***mark***
Standard index search cannot be carried out with this player.

Broadcast Reception

Automatic Tuning

Before reception, be sure to connect the supplied AM and FM antennas.



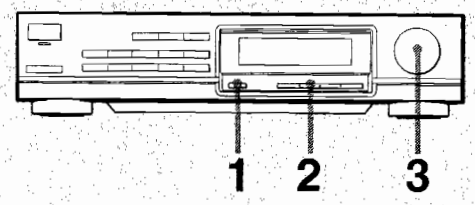
To receive a station having a lower frequency (Step 4)
Turn the TUNING knob toward −.

To receive a station having a higher frequency (Step 4)
Turn the TUNING knob toward +.

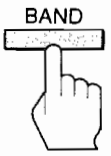
To receive other stations
When the received station is not the one you want, turn the TUNING knob again.

In the display window
- The "TUNED" indicator appears when a station of sufficient signal strength is received.
- The "STEREO" indicator appears when an FM stereo program of sufficient signal strength is received.

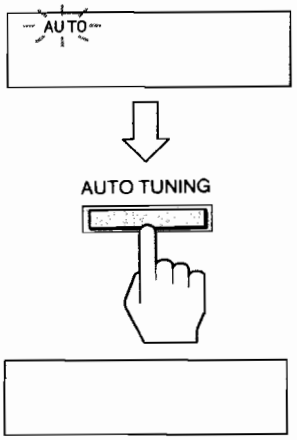
Manual Tuning



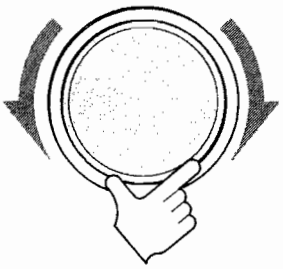
1 Select the band.



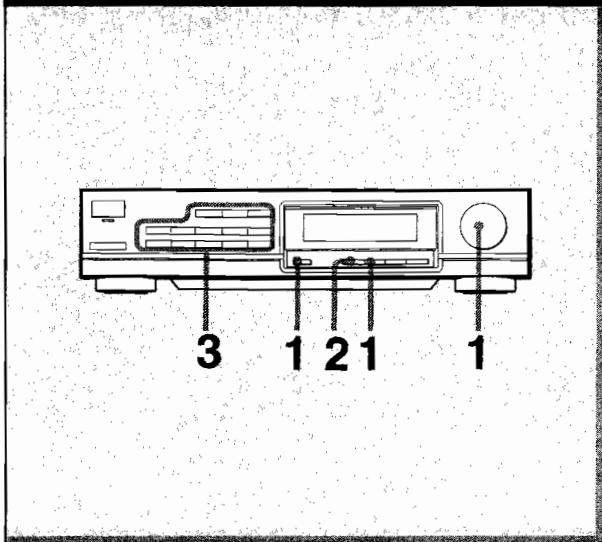
2



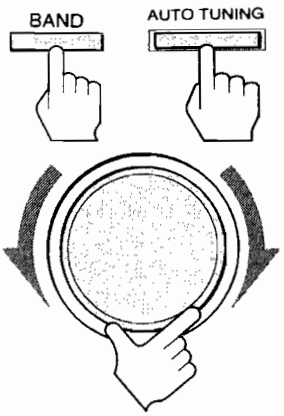
3 Turn the TUNING knob fully toward "+" or "−" until the desired station is received.



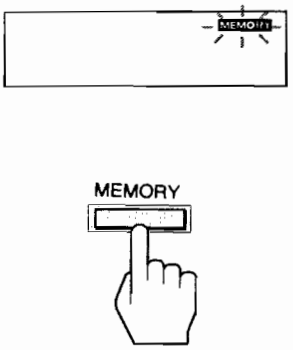
Manual Tuning



1 Tune in a station to be stored.

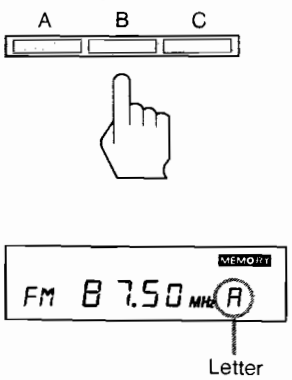


2

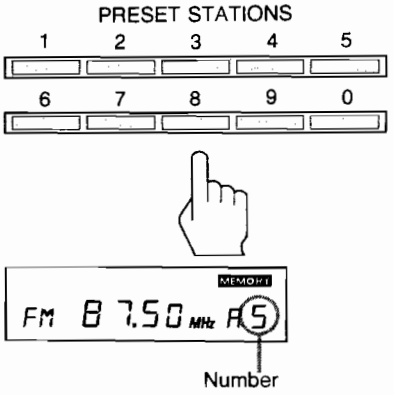


3 While the "MEMORY" indicator is displayed, store the station under a desired code.

First select a letter.



Then select a number.



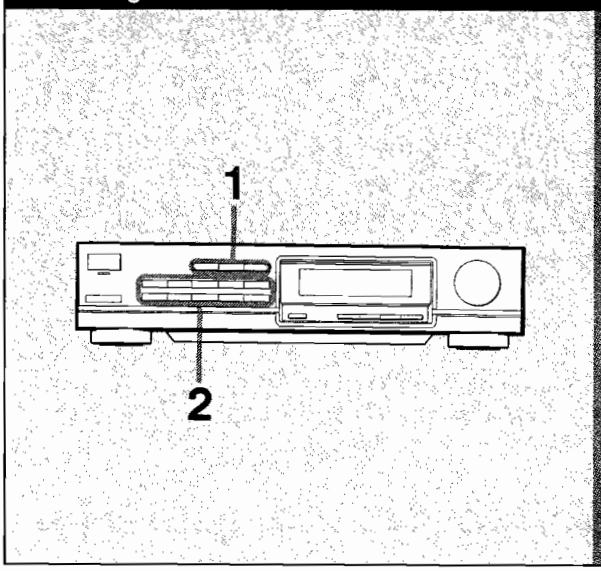
Important

- The "MEMORY" indication will go off after a few seconds. If the "MEMORY" indication has gone off, press MEMORY again.
- Storing a new station under a preset station number erases the previously memorized station.
- The memorized station is maintained for approximately one month even if the power remains off.

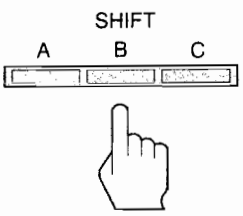
How many stations can be stored?

Up to 10 stations can be stored in any order for each letter (A, B, C). Therefore, 30 stations can be stored in total.

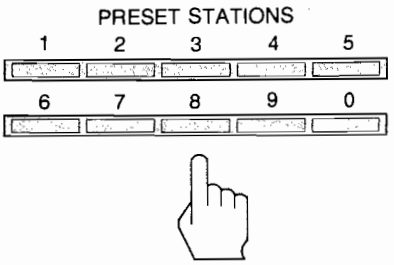
Receiving a Stored Station



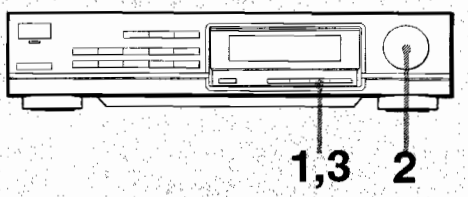
1 First select a letter.



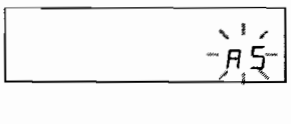
2 Then select a number.

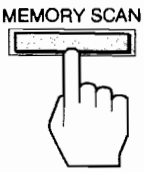


Scanning Stored Stations

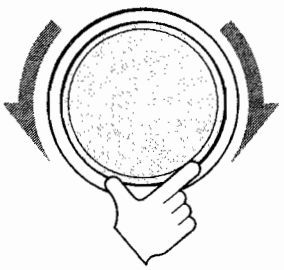


1

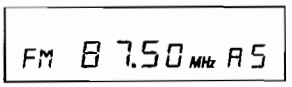


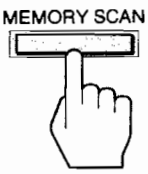


2 The stored stations are automatically received sequentially for a few seconds each.



3 When the desired station is received:



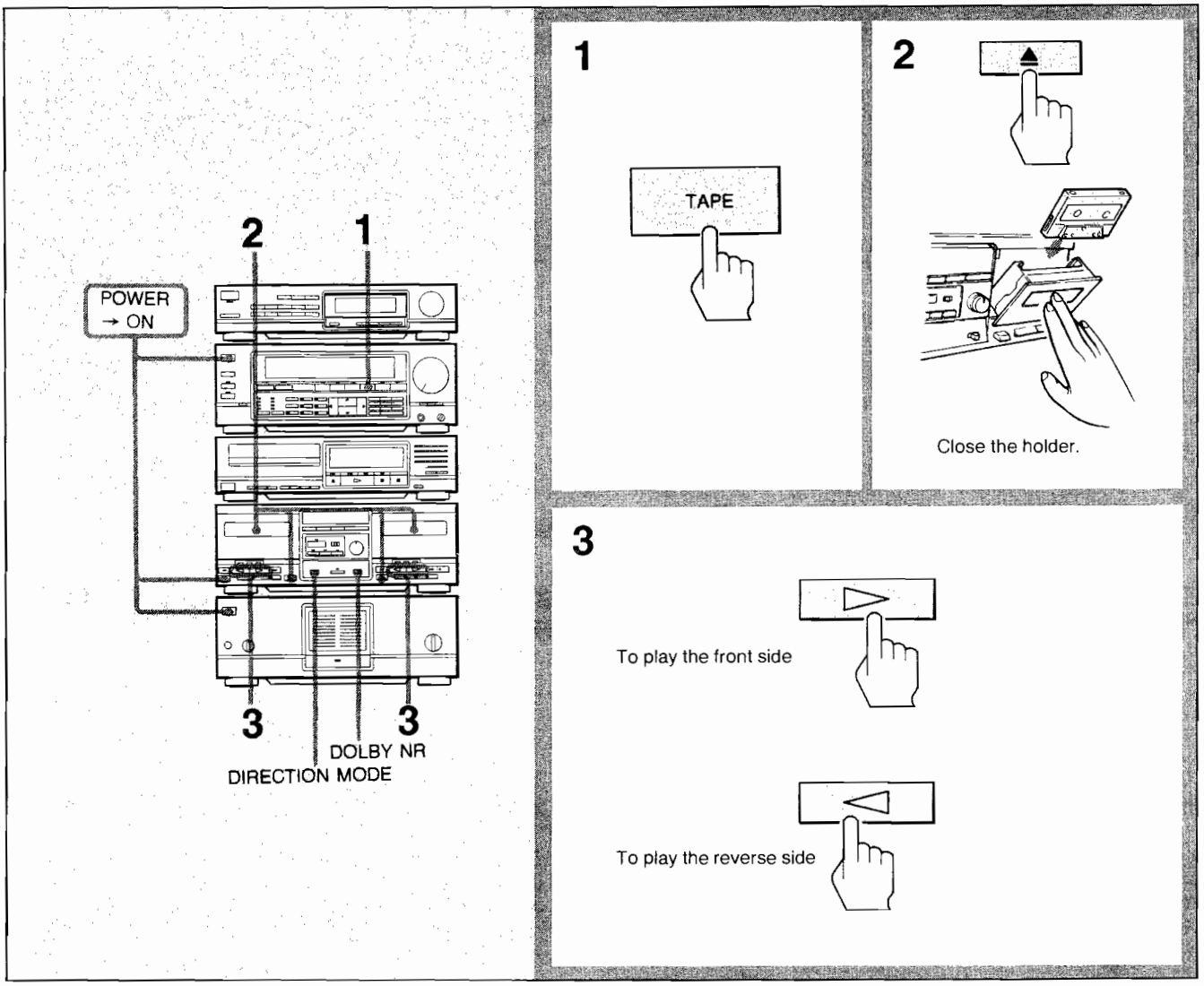


Scanning stops.

Which stations are skipped during memory scanning?
The memory scan will skip stations which have a very weak signal.

When you want to scan the stations in order of the PRESET STATIONS instead of in order of frequency
Press PRESET/FREQUENCY. Turning the TUNING knob now scans the stations in order of the PRESET STATIONS (A1, A2, A3, for example). The scanning mode returns to normal after a station is kept tuned for a few seconds or when PRESET/FREQUENCY is pressed again.

Tape Playback (either deck A or B)



To stop playback, press ■.

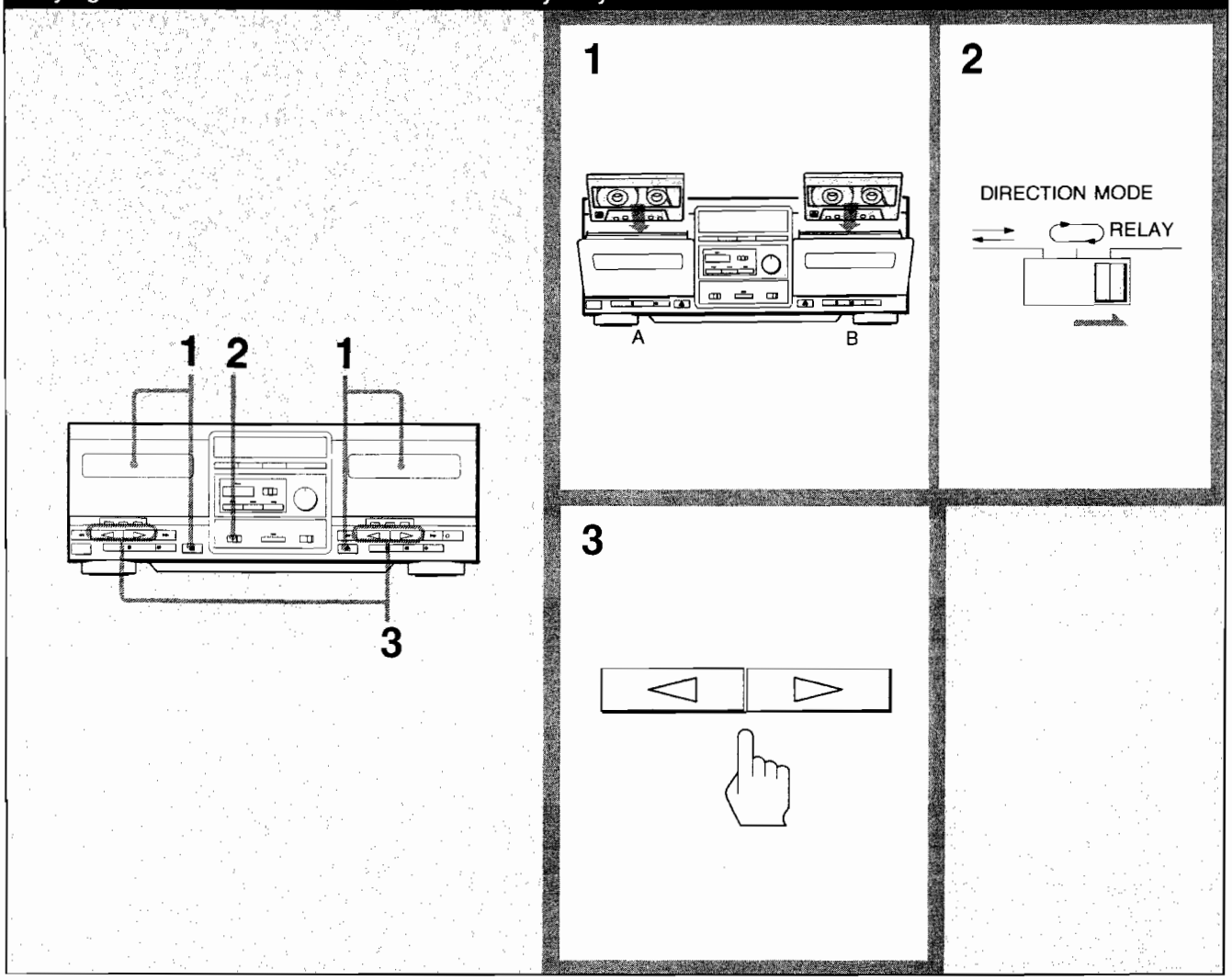
When both decks A and B are in playback mode
Only the playback from deck A will be audible.

How to select the DIRECTION MODE
To play back one side, select ⇒.
To play back both sides, select ⇄.
To play back the tapes in both decks in succession, select RELAY.
(The sequence is repeated 5 times.)

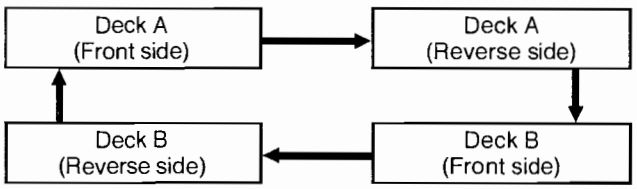
DOLBY setting
The DOLBY NR (Noise Reduction) switch operates for both decks A and B.
Cassette tape recorded with Dolby NR B: DOLBY NR → B
Cassette tape recorded with Dolby NR C: DOLBY NR → C
Cassette tape recorded without Dolby NR: DOLBY NR → OFF

Usable tape types
TYPE I (Normal) (Sony HF-S), TYPE II (CrO_2) (Sony UX-S) and TYPE IV (Metal) (Sony METAL-ES) can all be used for both playback and recording.

Playing from Deck A to B in Succession – Relay Play



Relay play always follows the sequence below regardless of where playback starts.
The sequence is repeated 5 times.



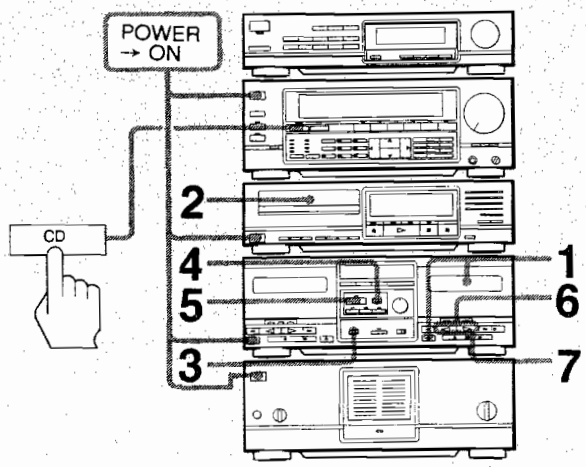
To stop play, press ■ of the deck being played at that time.

Playing Back Automatically after Fast Winding – Auto Play

You can automatically start playback from the beginning of a tape following fast winding.

- **From the beginning of the front side**
  Press both ◀◀ and ▷ simultaneously.
- **From the beginning of the reverse side**
  Press both ▶▶ and ◁ simultaneously.

Recording the Entire Program on a Disc – Fade Edit Recording

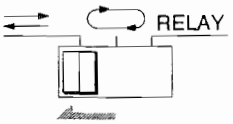


1 Insert a recordable tape into deck B.
Use a tape whose recording time is little longer than the total playback time of the disc.

2 Insert a disc into the CD player.

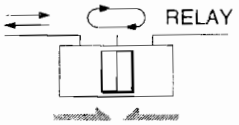
3 record on one side

DIRECTION MODE

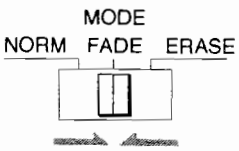


record on both sides

DIRECTION MODE



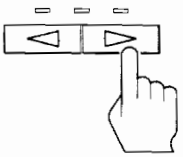
4



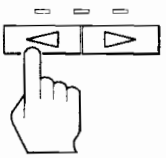
5

Deck enters recording puase mode.

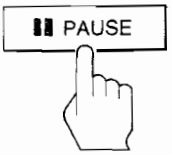
6 Record on front side/
Record on both sides



Record on reverse side/
Record on one side



7 Start recording.



To stop recording, press ■ on the deck. CD playback stops simultaneously.

About the length of the tape to be used:
When the tunes on a disc are long, such as with a classical music, all the selections on the disc might not be recorded even if the recording time of the tape is longer than the total playback time of the disc. This is because the tune with faded out in the middle at the end of side A is recorded again from the beginning on side B. Therefore, select a tape considering the length of the tune which comes at the end of side A in addition to the total playback time of the disc.

CD program playback does not start immediately because:
The Synchronized Start function waits until the tape leader of the tape, which cannot be recorded, is fed through. CD playback starts approximately after 10 seconds.

To start recording from the middle of a tape:
CD program starts after approximately 10 seconds even when recording is started from the middle of a tape. This is because the tape is considered blank when inserting the tape after pressing ⏏. To start recording without waiting 10 seconds, press O REC MUTE first and then II PAUSE after step 5 above. Once the Fade Edit recording is stopped, CD playback and recording starts at the same time when the recording is restarted.

When a tune ends in the middle at the end of side B:
The tune is recorded again from the beginning and the portion of the tune near the end of the tape fades out.

When the end of a tune comes at the end of the tape:
The tune does not fade out.

When the beginning of a tune comes at the end of side A:
If side A ends within 20 seconds from the beginning of a new tune, the tune is erased instead of being faded out and is recorded from the beginning on the side B.

During Fade Edit recording:
A blank space of 3 seconds is inserted automatically between each selection.

Note
Do not press buttons which are unrelated to Fade Edit recording. The fade out operation may not be executed at the right portion.

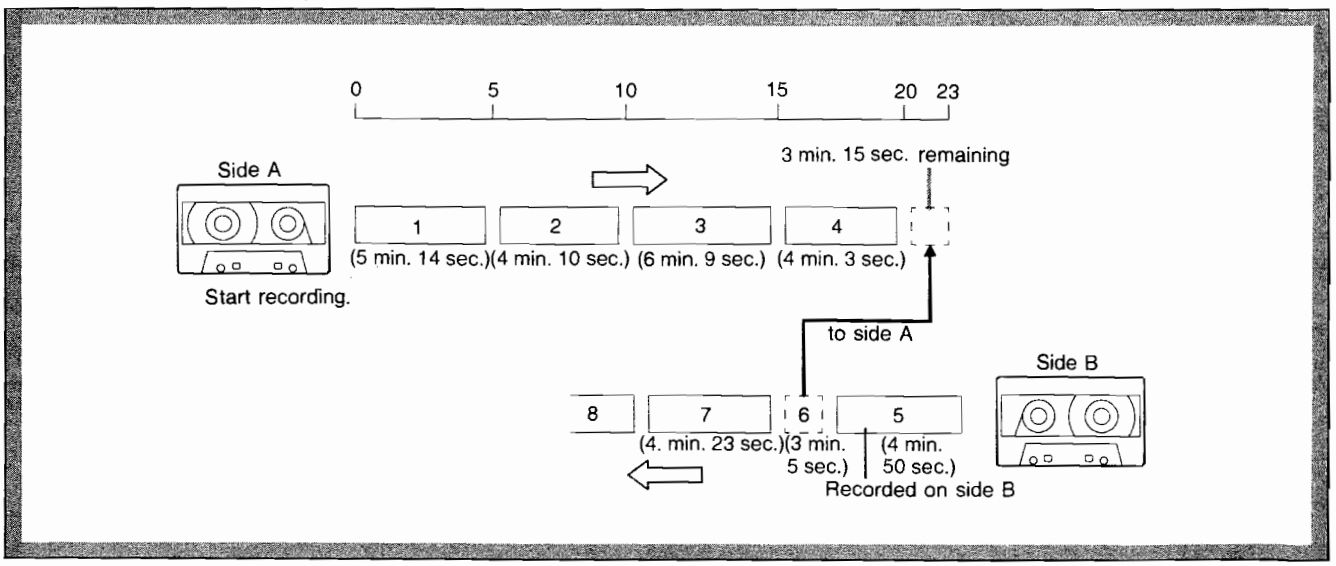
MODE switch settings other than FADE:
Besides Fade Edit recording, the following modes recording can also be selected.

MODE switch	Recording mode
NORM	Normal recording Recording on side B starts when side A ends. Select when recording long selections such as classical tunes.
ERASE	Erases the tune which ends in the middle at the end of side A. The tune will be recorded on the side B. The recorded tape is played back easily by using the Blank Skip function.

Recording after Selecting Tunes to Match the Tape Length – Time Edit Recording

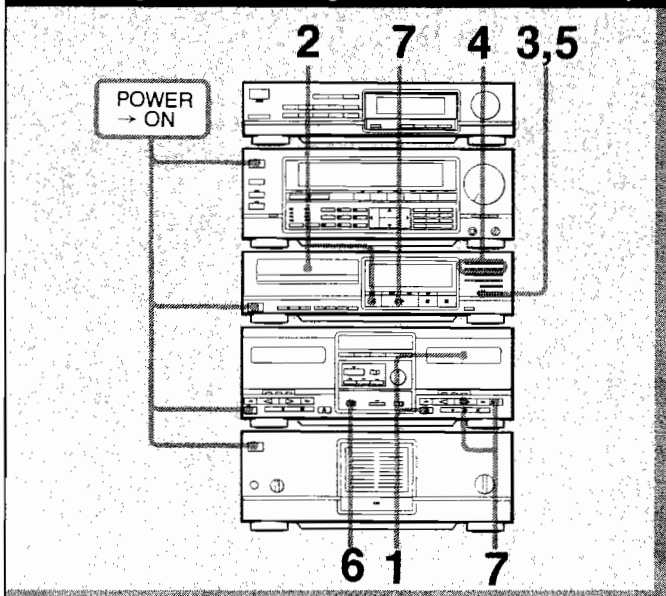
This function is convenient when the recording length of the tape is known and it is desired to record as many tunes from the compact disc as possible. Once you specify the tape recording time, the time edit function automatically selects tunes from the CD starting with the small track numbers so that the total recording time of the selected tunes does not exceed the specified recording time. In addition, it is possible to pre-select those tunes which you definitely want to record (i.e., those tunes which you want the time edit function to include in the tune selection). The tunes are recorded preferentially at the beginning.

Example: When the entire length of the fifth tune cannot be recorded at the end of side A of a 46-minute tape (one side: 23 minutes):
The sixth tune is recorded at the end of side A in place of the fifth tune. (If the sixth tune also will not fit into the time remaining on side A, the seventh tune will be selected, and so on.).



Note
Auto-reverse recording is not possible.

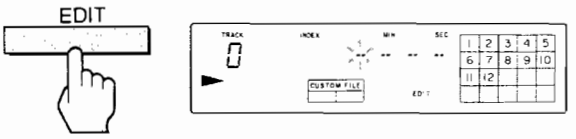
Recording after Selecting Tunes to Match the Tape Length – Time Edit Recording



1 Load a recording tape into deck B.

2 Load a disc into the CD player. (page 16)

3

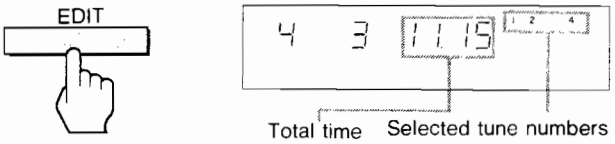


"EDIT" lights up and "—" blinks.

4 Specify the recording time of a single side of the cassette tape.

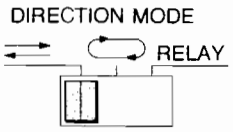
Use the numeric buttons (1 – 10).
Example: To specify a recording time of 11 minutes 30 seconds: Press the numeric buttons in the following order:
[1] → [1] → [3] → [10].

5



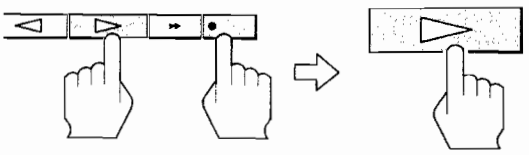
Tunes to be recorded on a single side of the tape are automatically selected to fit the specified recording time.

6



7 Start recording.

Deck B — CD Player



While pressing ●, press ▷. Disc playback and recording begin.

To record on the opposite side of the tape
Press the EDIT button once again at step 5.
The tunes to be recorded on the opposite side will be selected from the remaining tunes.
When recording on the first side of the tape is completed, the compact disc player enters pause mode. If a section of blank, unrecorded tape remains at the end of the tape, press the deck's fast forward button and fast-forward the tape to the end. When starting recording on the opposite side of the tape, press the ◁ button while pressing and holding the ● REC button of deck B. After the tape leader has been fed through, press the ▷ button on the CD player.

To Preferentially Select Desired Tunes

When using the EDIT button to select tunes to fit the recording length of a tape, you can place priority on tunes to be recorded by first pre-selecting the desired tunes.

1 **Press the PROGRAM button.**
2 **Use the numeric buttons to sequentially select the numbers of the tunes you wish to prioritize.**
3 **Perform steps 3 to 7 of the procedure in the "Recording After Selecting Tunes to Match the Tape Length" section.**

To Select Desired Tunes While Keeping Track of the Total Time – Program Edit

This function enables you to select tunes for recording on sides A and B of a tape while keeping track of the total playing time of the tunes. Also, when recording the selected tunes, the tape deck enters pause mode when the end of side A is reached, making it easy to continue recording on side B.

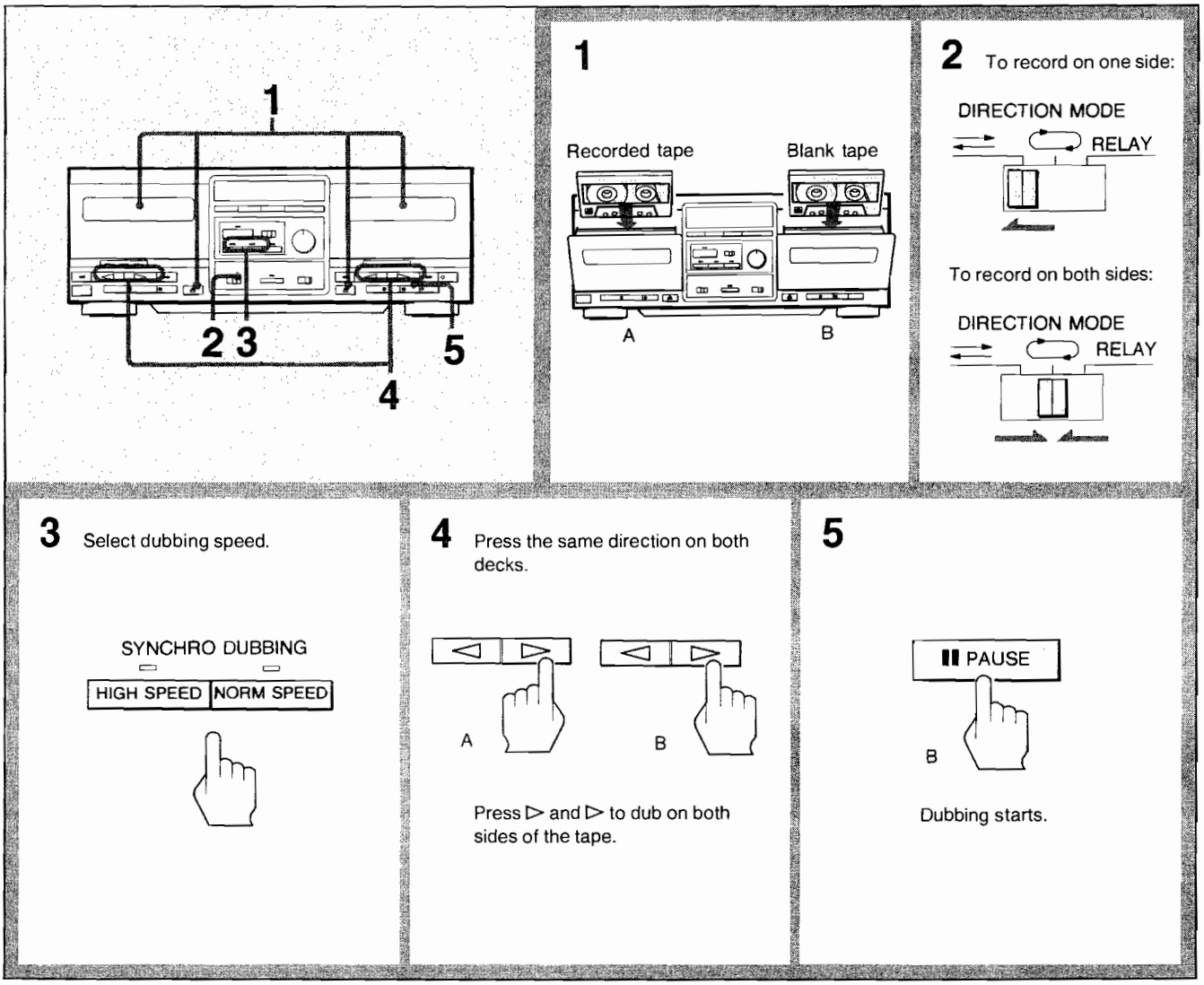
Program edit recording can be carried out using the following procedure.

1 **Press the PROGRAM button.**
2 **Indicate a tune you wish to record using the ⏮ and ⏭ buttons.**
Search for a tune to record while confirming the total recording time in the display window.
3 **Press the PROGRAM button.**
The number of the tune selected in step 2 is stored in the program memory.
4 **Repeat steps 2 and 3 to select the tunes to be recorded on side A.**
5 **After all of the tunes for side A have been selected, press the ⏸ PAUSE button.**
A pause is stored (programmed) in memory. The pause is indicated by a "P" in the display window, and the total time display returns to 0:00.
6 **Repeat steps 2 and 3 to select the tunes to be recorded on side B.**

Discs which have more than 20 tunes
It is not possible for tunes with tune numbers greater than 20 to be selected automatically. If it is desired for a tune number which is greater than 20 to be selected, use the program edit procedure above to pre-select the desired tune.

When the recording times for sides A and B are different
After the tunes for one side have been selected in step 5 of the time edit procedure, record those tunes on that side. After recording on the first side is completed, specify the recording time for the opposite side and press the EDIT button. The edit function will automatically select tunes for the opposite side from the remaining tunes. Record the tunes on the opposite side in the same manner as for a single side.

Tape Dubbing (from deck A to deck B)



To stop dubbing

Press ■ on deck B during dubbing at NORM (normal) SPEED.

Press ■ on deck A or deck B during dubbing at HIGH SPEED. During HIGH SPEED dubbing, only ■ is operative.

How to select DIRECTION MODE (Step 2)

⇄: Dubbing on one side of a tape with the same length. Dubbing stops at the end of each tape.

⟲: Dubbing on both sides of a tape with the different length. Each tape reverses the side separately at the end of the front side.

RELAY: Dubbing on both sides of a tape with a same length. Both tapes reverse the side simultaneously at the end of the front side of the shorter tape.
When dubbing starts from the reverse side, dubbing stops automatically at the end of the reverse side.

Is it necessary to adjust the recording level and select the DOLBY NR system?

No. The cassette in deck B is automatically recorded with the same recording level and Dolby noise reduction system as the original cassette in deck A.

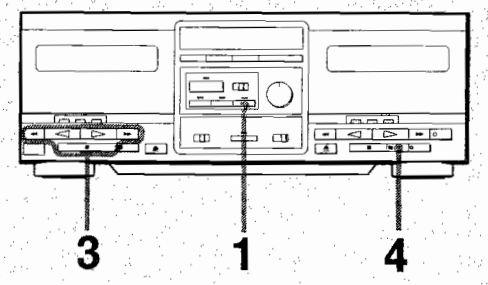
If the indicator on either the NORM or HIGH SPEED button blinks three times

The tab(s) of the cassette inserted into deck B has (have) been removed. Dubbing is not possible on that cassette. Cover the slot with plastic tape (see page 38.)

Is it possible to listen to a program source other than the tape during dubbing?

Yes. Any program source can be selected with the preamplifier's function control.

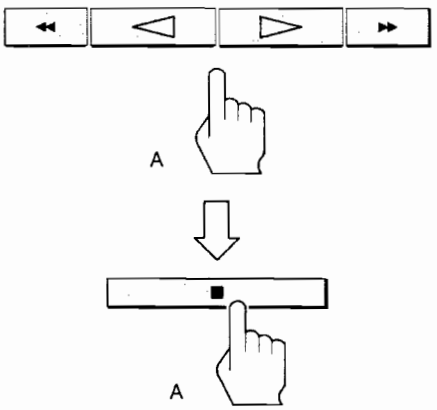
Dubbing Only Desired Selection Using AUTO PAUSE



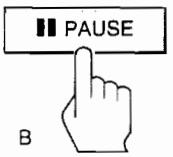
1 During normal speed dubbing:

2 Deck A enters pause mode and deck B enters recording pause mode at the end of each selection.

3 Search for the desired selection.



4 Then press ❚❚ PAUSE on deck B.



Dubbing restarts.

Notes

- The editing functions can only be used during normal speed dubbing.
- When a pause between tunes is less than 4 seconds or if there is loud noise between tunes, the deck may not enter the pause mode.

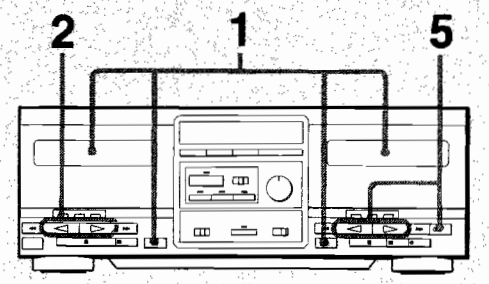
Dubbing Only Desired Sections

1 Start dubbing using normal speed dubbing.
2 Press ■ on deck A when the tape comes to an unwanted section (deck B enters recording pause mode).
3 Search for the desired portion (deck A).
4 Start playing the desired section on deck A.
5 Press ❚❚ on deck B. Dubbing restarts.

Tape Dubbing (from deck A to deck B)

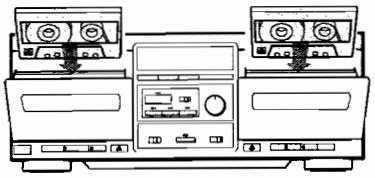
Dubbing with the Desired Sound – Manual Dubbing

A tape can be dubbed after the sound is adjusted by the equalizer, dynamic sound and/or surround.



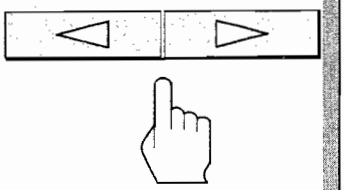
1

Recorded tape Blank tape



A B

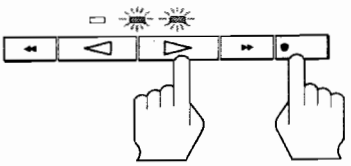
2 Select TAPE on the preamplifier and start playback on deck A.



3 Adjust the sound with the equalizer, dynamic sound and/or surround.

4 On the preamplifer:

5 Start dubbing.



While pressing ● on deck B, press ▷.

Note

Sound adjusted with the equalizer, dynamic sound and/or surround cannot be dubbed when dubbing is carried out by pressing HIGH SPEED or NORM SPEED even when EQUALIZER RECORDING is pressed on.

Using the Preamplifier's Sound Manipulation Features

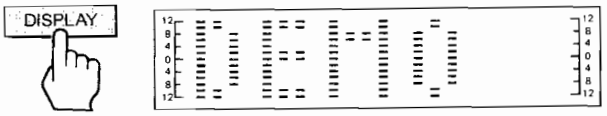
The preamplifier is equipped with three sound manipulation functions – an equalizer function, a surround function, and a dynamic sound function – for improving the sound in your listening environment.
The equalizer can be used to raise and lower the levels of specific frequency ranges. The surround function can be matched to the music genre or source to effectively reproduce a feeling of "being there". The dynamic sound function can be used to give a powerful feeling to music when listening at low volume levels.
Making full use of these three functions allows you to create a variety of different sounds and effects and to maximize your music listening enjoyment.

Demo Mode

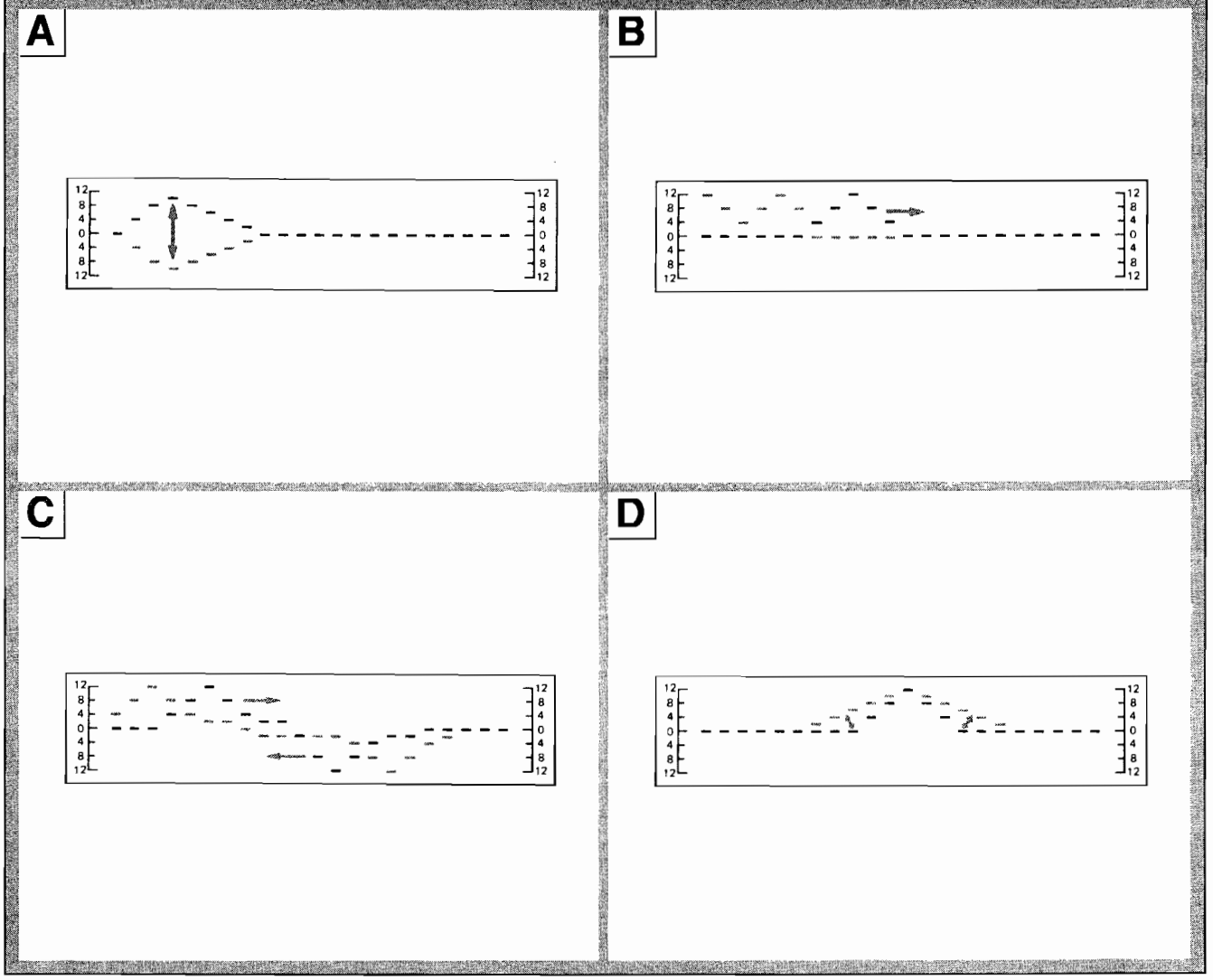
This system is provided with a demo mode to allow you to get a taste of the rich variety of effects possible with the preamplifier functions. Before using the preamplifier to make adjustments to the sound, use the demo mode to experience the various effects while watching the changes on the display and listening to the differences in the quality of the sound produced by each effect. This mode demonstrates the effect of each of the following functions.

- DP EQ (Digital Parametric Equalizer) – Level adjustment of specific frequency ranges
- RUN – Equalizer curve movement
- CROSS – Equalizer curve synthesis
- SLOPE – Equalizer curve slope selection
- DPS – Digital Presence Surround
- DDS – Digital Dynamic Sound
- DISP (Display) – Spectrum analyzer/Peak value display
- DATA CALL – Preset memory
- USER CALL – User memory

1 **Play a compact disc or other program source.**
2 **Press the DISPLAY button a number of times until the DEMO indication appears on the display.**
After "DIGITAL" is displayed, demo mode begins.



Demo Mode Contents



A DP EQ (Digital Parametric Equalizer)
(Frequency range level increase/decrease display)
This shows how the level of each of the three frequency ranges – low, middle, and high – can be raised and lowered. This operation is fundamental to creating equalizer curves to suit your individual taste and listening environment.

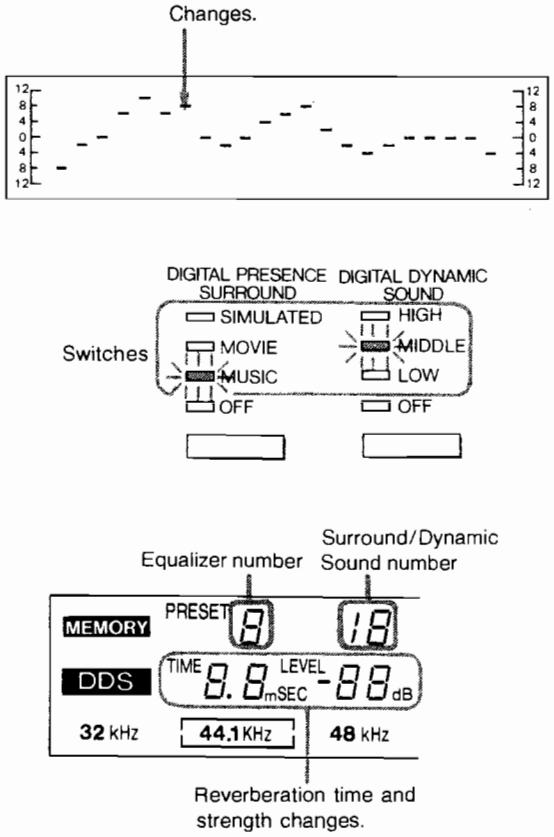
B RUN
(Equalizer curve movement display)
This shows how the equalizer curve can be moved to the left and right.
The sound changes as the curve moves.

C CROSS
(Equalizer curve synthesis display)
This shows what happens when two "hills" of an equalizer curve are moved toward each other and combined (synthesized) into one.

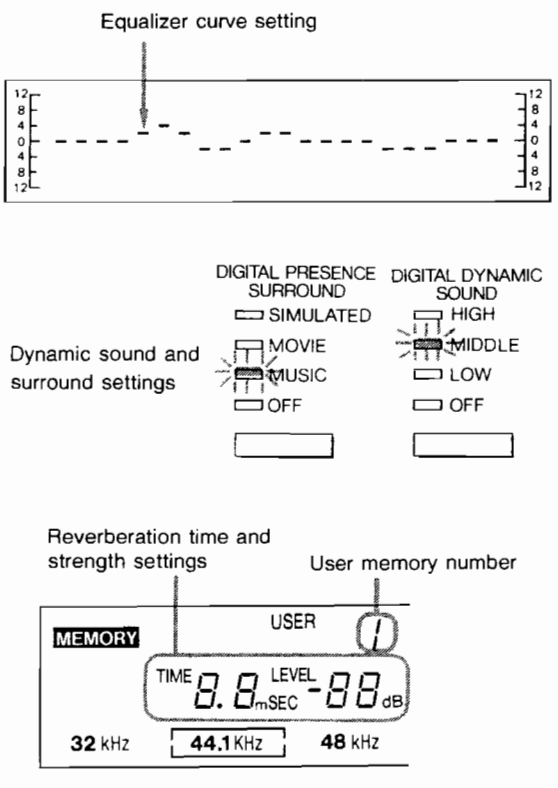
D SLOPE (EQ SLOPE)
(Equalizer curve slope selection display)
This shows how the attenuation (the rapidity with which the level is decreased) of the equalizer curve peak can be switched in two stages.
The difference in the quality of the sound can be heard when the EQ SLOPE button is switched.

Demo Mode

H



I

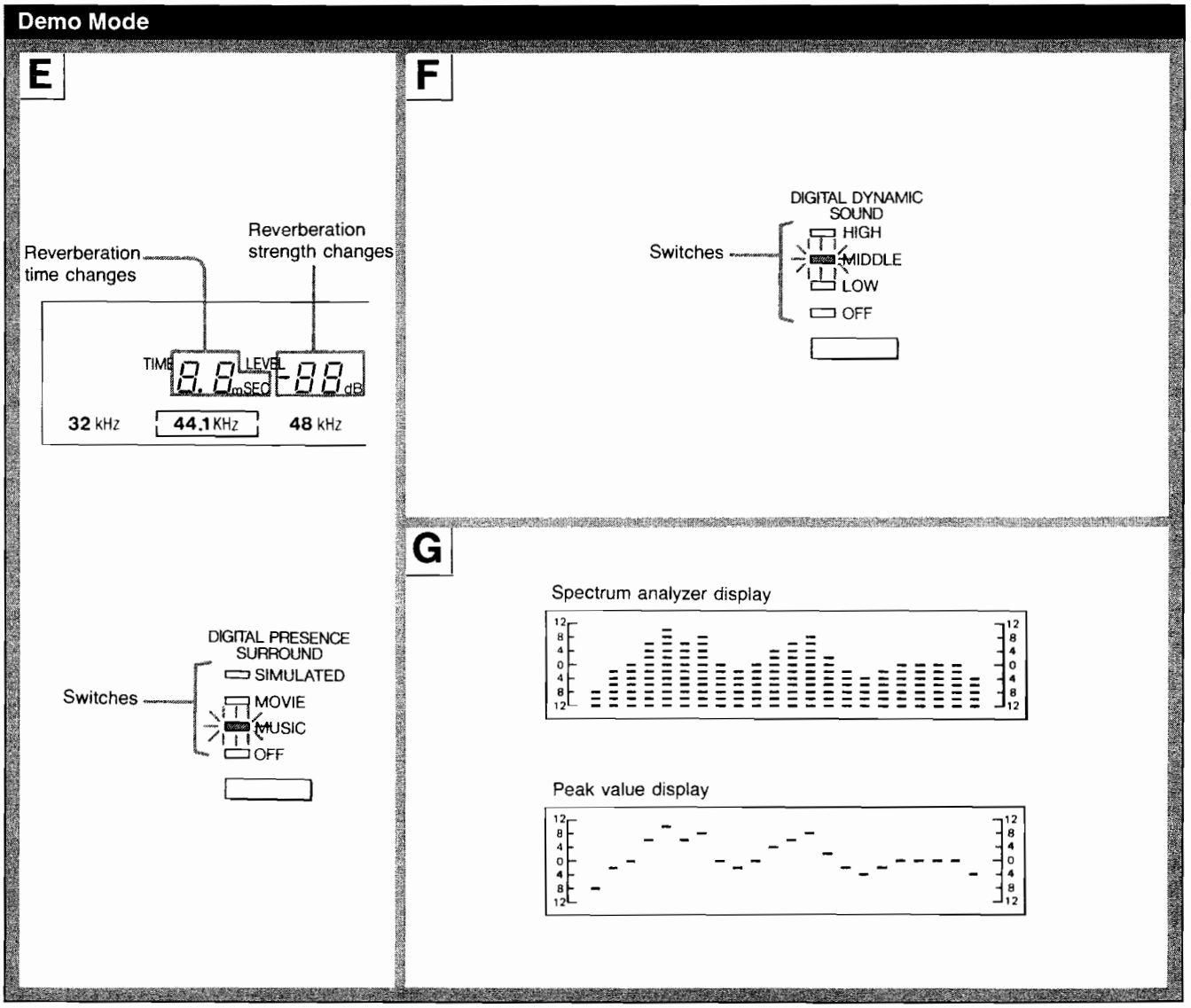


H DATA CALL
(Preset Memory)
Equalizer, dynamic sound, and surround settings have already been combined in various combinations and stored in the preamplifier's memory. You can choose from 200 different combinations (using the digital sound menu) according to the genre of the sound source and your individual taste.
Three types of digital sound menus are called up and displayed, enabling you to hear the difference between the different sound fields. Each of the equalizer curve, dynamic sound, surround, and reverberation time and level settings are varied.

I USER CALL
(User Memory)
With this feature, you can adjust the equalizer, dynamic sound, and surround settings according to your individual taste and store the settings in the preamplifier's user memory, enabling you to easily recall your settings at any time.
Three different hypothetical settings are recalled from user memory, allowing you to hear the differences between each of the sound fields. This shows how you can vary the equalizer curve, dynamic sound, and surround settings, as well as the surround reverberation time and strength settings.

Stopping Demo Mode and Making Sound Quality Adjustments
Press the equalizer, dynamic sound, or surround button you wish to adjust. Demo mode is automatically canceled.

Demo Mode



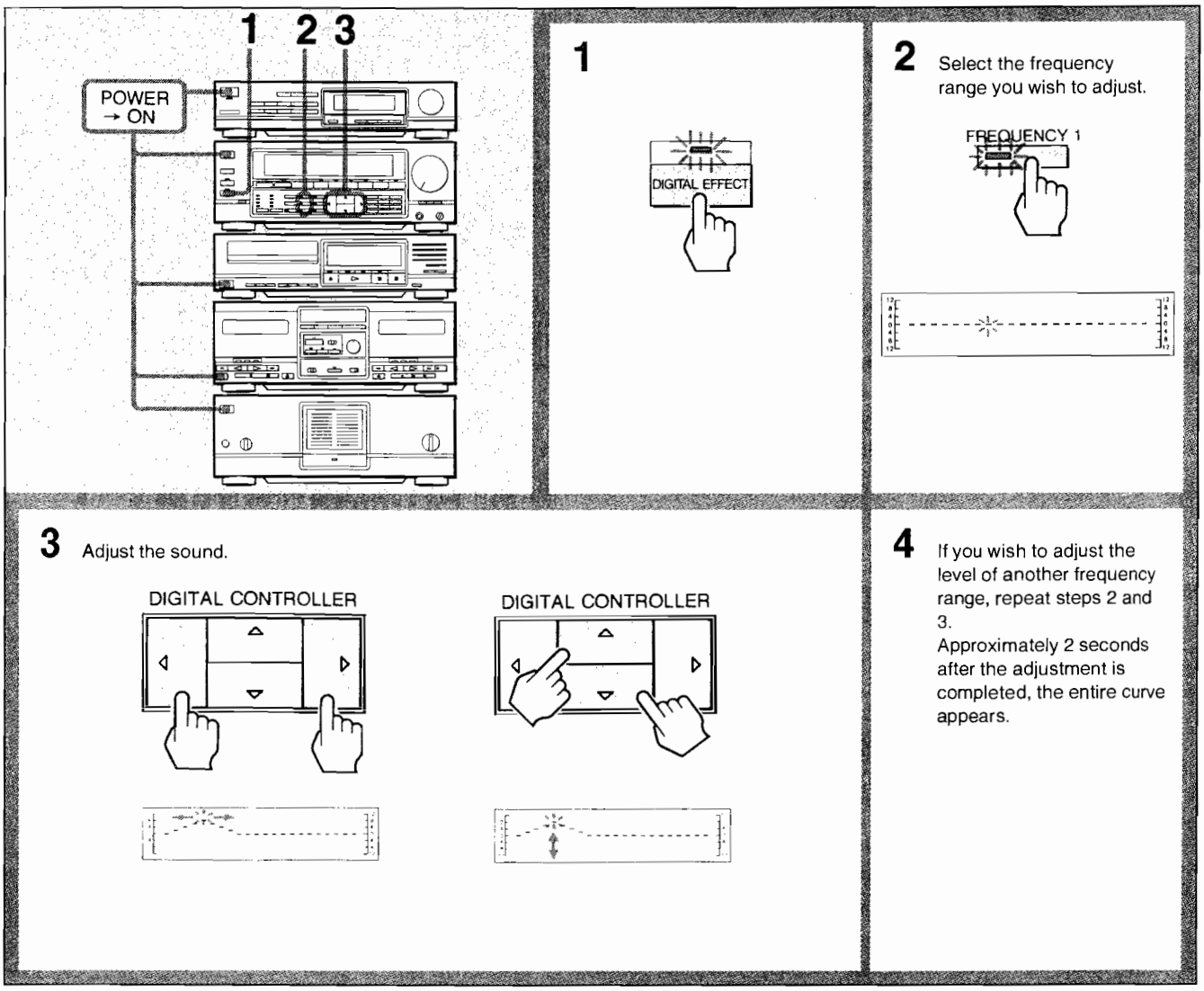
E DPS (Digital Presence Surround)
(MUSIC, MOVIE, SIMULATED)
You can select the surround effect to fit the genre of the music, and you can also set the reverberation time and strength. These functions allow you to create a sound that has a feeling of "being there".
This shows the difference between the three types of Digital Presence Surround (MUSIC, MOVIE, and SIMULATED).

F DDS (Digital Dynamic Sound)
(LOW, MIDDLE, HIGH)
When listening at low volume levels, the Digital Dynamic Sound function boosts hard to hear sounds to improve the overall balance of the sound.
This shows the difference between the three types of Digital Dynamic Sound (LOW, MIDDLE, and HIGH).

G DISP (Display)
This shows how the display can be switched between the spectrum analyzer display and the peak value display.

Adjusting the Sound Using the Digital Parametric Equalizer

This feature allows you adjust the sound by raising and lowering the levels of specific frequency ranges.


1 2 3
POWER → ON
1
DIGITAL EFFECT
2 Select the frequency range you wish to adjust.
FREQUENCY 1
3 Adjust the sound.
DIGITAL CONTROLLER
DIGITAL CONTROLLER
4 If you wish to adjust the level of another frequency range, repeat steps 2 and 3.
Approximately 2 seconds after the adjustment is completed, the entire curve appears.

At step 2:

Button	Frequency range
FREQUENCY 1	Low range
FREQUENCY 2	Middle range
FREQUENCY 3	High range

When the unit is shipped from the factory, or after the CLEAR button has been pressed to erase the adjustment settings (see page 62), each of the three frequency buttons is defined for a specific frequency range as shown in the above table, so decide what your goal is before proceeding. The adjustable frequency range can be freely moved left and right (low ←→ high) along the frequency scale as explained in the next step. This allows each of the frequency buttons (1 – 3) to be used for any frequency range. For example, the FREQUENCY 1 button does not have to be used to adjust a low-frequency range, but can be used instead to adjust a mid- or high-frequency range by moving it to the right along the scale.
Once the FREQUENCY 1 – 3 buttons are set, the frequency range represented by the buttons remain unchanged until the buttons are readjusted.

At step 3:

◁ or ▷: Shifts the frequency range to be adjusted to the left or right.

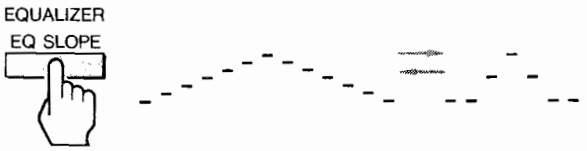
△ or ▽: Raises or lowers the level of the frequency range centering around the blinking dot.

Note:

If two "hills" on the equalizer curve are combined and the peak of the resulting "hill" exceeds 12 dB, the dots which represent levels higher than 12 dB blink.

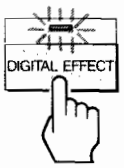
Changing the slope of the adjusted curve

1 **Check to make sure that one of the FREQUENCY 1 – 3 buttons is lit.**
If none are lit, press one of the FREQUENCY (1 – 3) buttons.
2 **Select the curve slope.**



Switches between a gentle slope and a sharp slope.

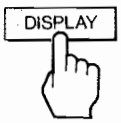
Confirming the effect of the adjustment



Every time the button is pressed, the sound is switched between the pre-adjustment settings and the adjusted settings, allowing you to hear and compare the difference.

Changing the display

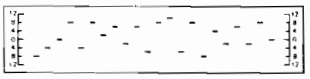
The display switches every time the button is pressed.



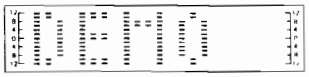
Equalizer curve shows how the sound you hear is adjusted.

Spectrum analyzer 1 shows the level of the music signal at each frequency band in real time.

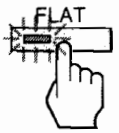
Spectrum analyzer 2 shows the maximum level value (peak value) of the music signal at each frequency band in real time.



Demo mode (page 49) indicates the start of demo mode.



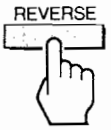
Remaking an equalizer curve



The equalizer curve becomes flat. You can now remake the equalizer curve from the beginning using the FREQUENCY 1 – 3 buttons and the DIGITAL CONTROLLER.

Reversing an equalizer curve

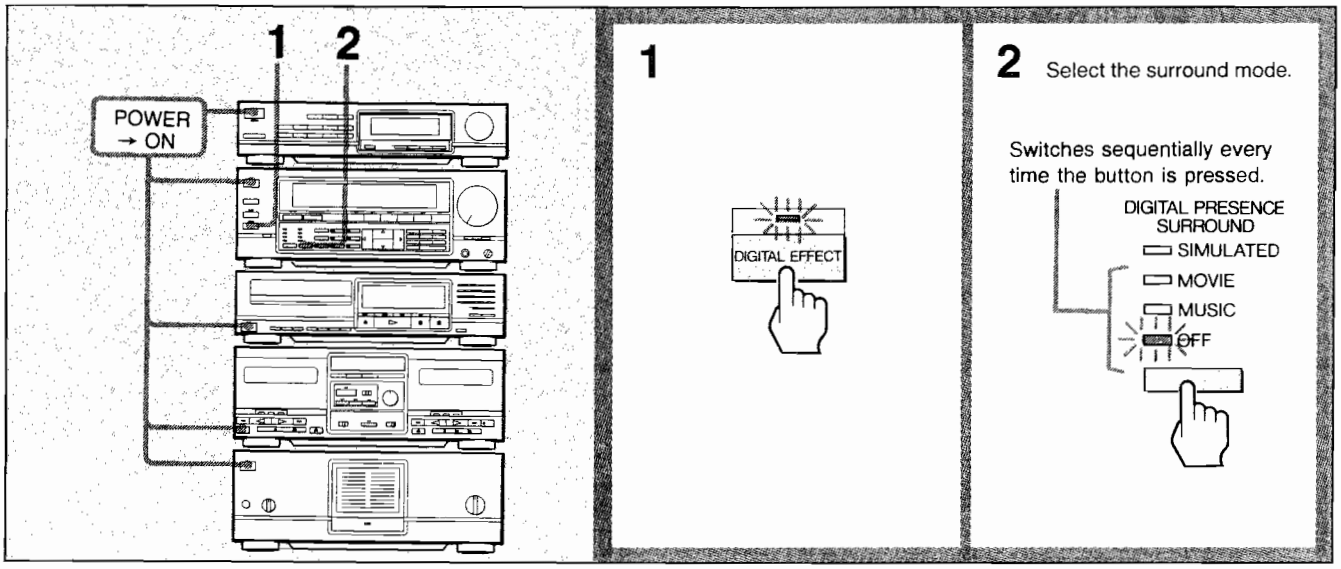
If you reverse the equalizer curve, you can hear sound adjusted with a pattern exactly the reverse of that of the original curve.



Press again and the curve reverts to its original shape. When recording a program source, if you pre-adjust the equalizer curve so as to raise the level of the high frequency sound before recording, and then reverse the curve during playback by pressing the REVERSE button, you can reduce high frequency noise.

Using the Digital Presence Surround Effects

By using this system's various surround effects, you can create a feeling of presence similar to being in a concert hall or movie theater.

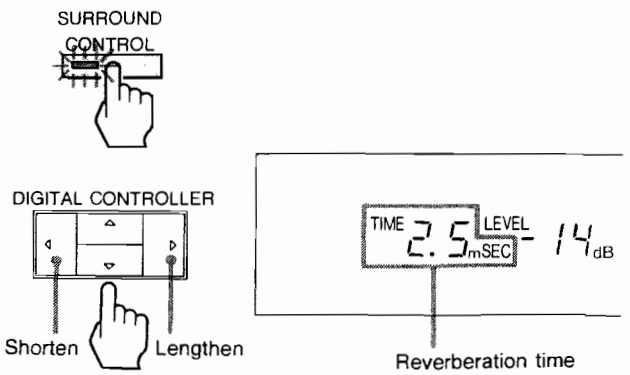


MUSIC	Switches to the music program
MOVIE	Switches to the movie program
SIMULATED	Gives monaural sources a stereo effect

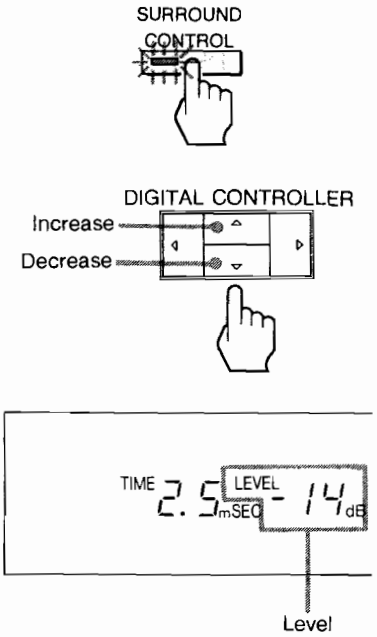
Readjusting the surround effect

The surround function allows you to adjust the length of the reverberation time and the level of the reverberated sound, putting you in control of a wide range of effects and sounds. The surround effect adjustments should usually be set to match the size of the envisaged concert hall.
When you want to create the atmosphere of a small hall such as a live house or club, shorten the reverberation time.
When you want to create the atmosphere of a large hall such as a concert hall, lengthen the reverberation time.
If you want to add the feeling of being in a "live" hall where there is a lot of echo, increase the level (strength) of the reverberated sound. If you want to add the feeling of being in a "dead" hall where there is little echo, decrease the level of the reverberated sound.

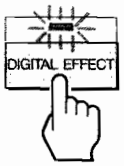
To vary the reverberation time



To vary the level of the reverberated sound



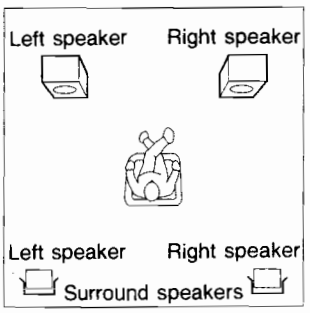
To confirm the surround effect



The sound is switched between the pre-adjustment settings and the adjusted settings, allowing you to hear and compare the difference.

When you do not want to apply the surround effect
Press so that the OFF indicator lights.

Typical speaker system layout
The example illustrated below is a typical speaker system layout. Vary the positioning and direction of the surround speakers to suit your listening environment and individual taste.



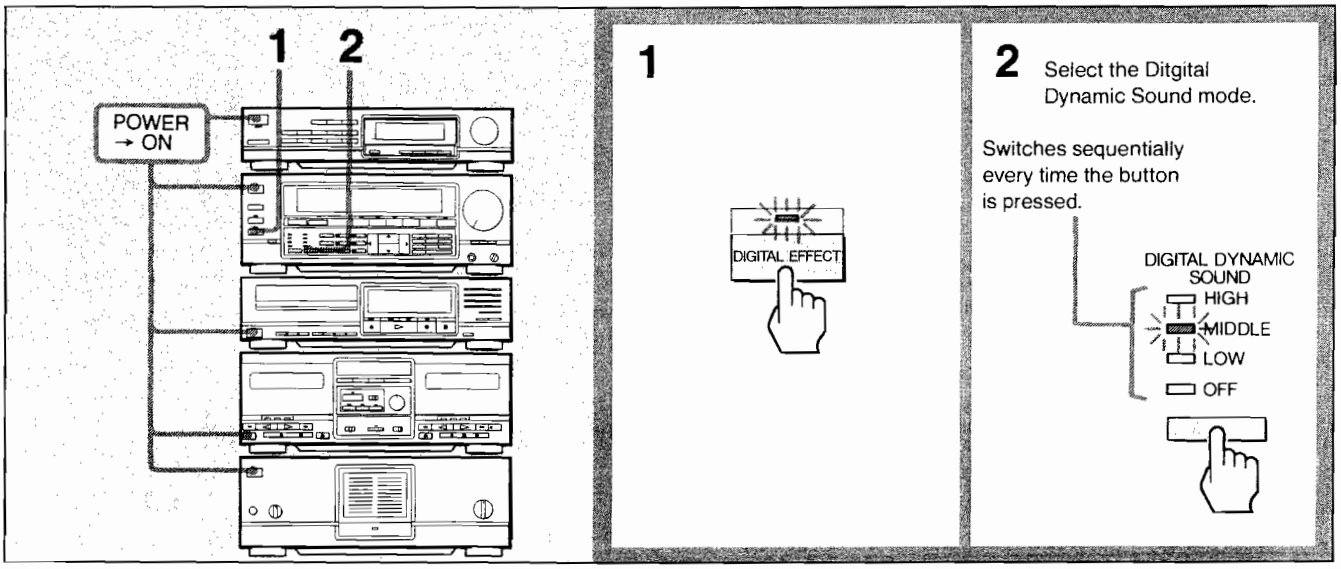
Note:
Even if the Digital Presence Surround selector is set to the OFF position, sound is output from the surround speakers. By connecting optionally available surround speakers to the surround speaker jacks, the sound field will be expanded to 360 degrees, enabling you to enjoy full-fledged surround sound.

Providing Low-Volume Sound with a Feeling of Power

- Digital Dynamic Sound

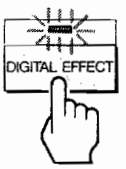
Use the Digital Dynamic Sound function.
Although this function can be enjoyed at normal volume levels, it is especially effective for making low volume sound more powerful.

Also, since this function has the effect of making low-volume sound easier to hear over external noise, it is effective for use when recording tapes meant for playing in a Walkman or car stereo.



Position	Strength of the Digital Dynamic Sound effect
HIGH	Strong
MIDDLE	Medium
LOW	Weak
OFF	Not applied

To confirm the dynamic sound effect



The sound is switched between the pre-adjustment settings and the adjusted settings, allowing you to hear and compare the difference.
When the DIGITAL EFFECT switch is OFF (when the indicator is extinguished), the equalizer, surround, and dynamic sound functions can be operated, but the sound you hear does not change. The DIGITAL EFFECT switch must be ON for the adjusted sound to be heard.

Digital Sound Menu

See "Using the Digital Sound Menu Settings to Adjust the Sound" for operation.
To handle different sound types and program sources, 200 different combinations of equalizer, surround and dynamic sound settings can be obtained.

10 specially recommended settings (SELECT 10) are stored in the user memory and indicated on the diagram.
Use this diagram to name and write down your personal sound settings.

	Digital Presence Surround			Digital Dynamic Sound	Equalizer / Sound field category	
	Category	Reverberation Time	Level			
19	—	—	—	MIDDLE	Dynamic sound	Strong
18	—	—	—	LOW		Week
17	MUSIC	2.4s	−4dB	HIGH	Late night listening	
16	MUSIC	2.4s	−3dB	LOW	Gym	
15	MUSIC	2.4s	−6dB	MIDDLE	BGM	
14	MUSIC	1.8s	−10dB	MIDDLE	Tape recording	Rock
13	MUSIC	1.8s	−20dB	MIDDLE		Pops
12	MUSIC	0.4s	−2dB	MIDDLE	Disco	
11	SIMULATED	30ms	−10dB	LOW	TV drama	
10	SIMULATED	25ms	−8dB	—	TV movie surround	
9	MOVIE	60ms	−8dB	—	Orchestra	
8	MOVIE	45ms	−14dB	—	Chamber music	
7	MOVIE	40ms	−12dB	—		
6	MOVIE	25ms	−4dB	—	Movie surround	
5	MOVIE	5ms	−10dB	—	Expansive presence	
4	MUSIC	3.2s	−10dB	—	Large hall	
3	MUSIC	1.8s	−5dB	—	Recital Hall	
2	MUSIC	1.8s	−10dB	—	Large room	
1	MUSIC	0.4s	−4dB	—	Small room	
0	OFF	—	—	—	—	

SELECT 10 user memory

[1] Large hall: Gives the atmosphere of a large hall which seats more than 2000 people.
[2] Recital hall: Gives the atmosphere of a hall which seats less than 1000 people.
[3] Orchestra: For a music such as classical music which is full of reverberation sound.
[4] Movie surround: For a video program which is recorded with surround.
[5] Simulated: Gives width to a monaural program source.
[6] Jazz club: Gives an atmosphere similar to a jazz club in which the sound is heard brightly and heavily.
[7] Gym: Gives an atmosphere similar to a gym.
[8] Walkman: For recording a tape to be listened to with a stereo headphones.
[9] BGM : For enjoyment of sound at low listening levels.
[10] Disco: Gives a sound similar to a disco which has firm floors and walls.

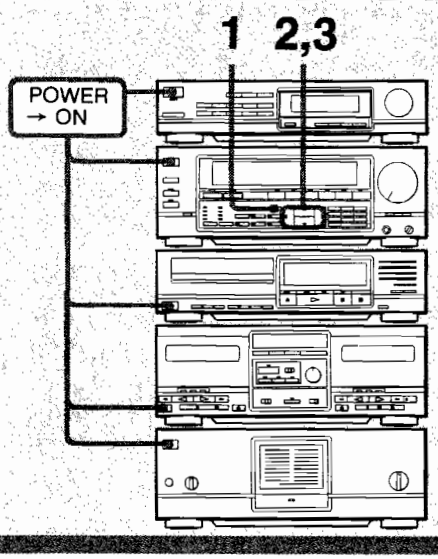
0	1	2	3	4	5	6	7	8	9
Flat	Lower frequency emphasized	Middle-low frequency emphasized	Sharp crisp sound	Conversation range emphasized	Middle range emphasized	Lower-middle range emphasized	Subsonic range cut	Lower frequency cut (Bright sound)	Strong bass
0-19	1-19	2-19	3-19	4-19	5-19 [8]	6-19	7-19	8-19	9-19 [10]
0-18	1-18	2-18	3-18	4-18	5-18	6-18	7-18	8-18	9-18
0-17	1-17	2-17	3-17	4-17	5-17	6-17	7-17	8-17	9-17
0-16	1-16 [7]	2-16 [9]	3-16	4-16	5-16	6-16	7-16	8-16	9-16
0-15	1-15	2-15	3-15	4-15	5-15	6-15	7-15	8-15	9-15
0-14	1-14	2-14	3-14	4-14	5-14	6-14	7-14	8-14	9-14
0-13	1-13	2-13	3-13	4-13	5-13	6-13	7-13	8-13	9-13
0-12	1-12	2-12	3-12	4-12	5-12	6-12	7-12	8-12	9-12
0-11	1-11	2-11	3-11	4-11	5-11	6-11	7-11	8-11	9-11
0-10	1-10	2-10	3-10	4-10 [5]	5-10	6-10	7-10	8-10	9-10
0-9 [3]	1-9	2-9	3-9	4-9	5-9	6-9	7-9	8-9	9-9
0-8	1-8	2-8	3-8	4-8	5-8	6-8	7-8	8-8	9-8
0-7	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7
0-6	1-6	2-6	3-6 [6]	4-6 [4]	5-6	6-6	7-6	8-6	9-6
0-5	1-5	2-5	3-5	4-5	5-5	6-5	7-5	8-5	9-5
0-4	1-4	2-4 [1]	3-4	4-4	5-4	6-4	7-4	8-4	9-4
0-3 [2]	1-3	2-3	3-3	4-3	5-3	6-3	7-3	8-3	9-3
0-2	1-2	2-2	3-2	4-2	5-2	6-2	7-2	8-2	9-2
0-1	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1
0-0	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0	9-0

Using the Digital Sound Menu Settings to Adjust the Sound

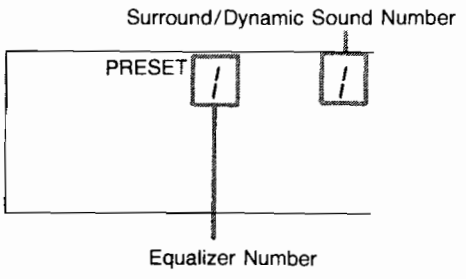
This unit has a memory containing 10 different preset equalizer settings (0 – 9) and 20 different preset surround and dynamic sound settings (0 – 19) (Digital Sound Menu) for handling different sound types and program sources. This function enables you to choose from 200 (10 × 20) different equalizer and surround/dynamic sound combinations to set the sound quality to suit your taste and listening conditions. Adjust the sound to fit your taste.

See "Digital Sound Menu" on the previous two pages for the contents of the Digital Sound Menu.

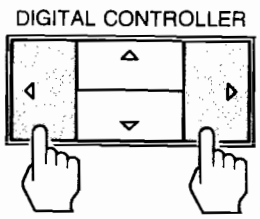
Calling Up the Sound Menu Settings



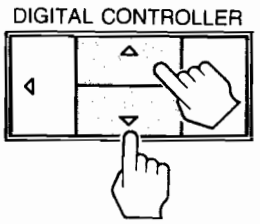
1



2 Call up the equalizer number (0 – 9).



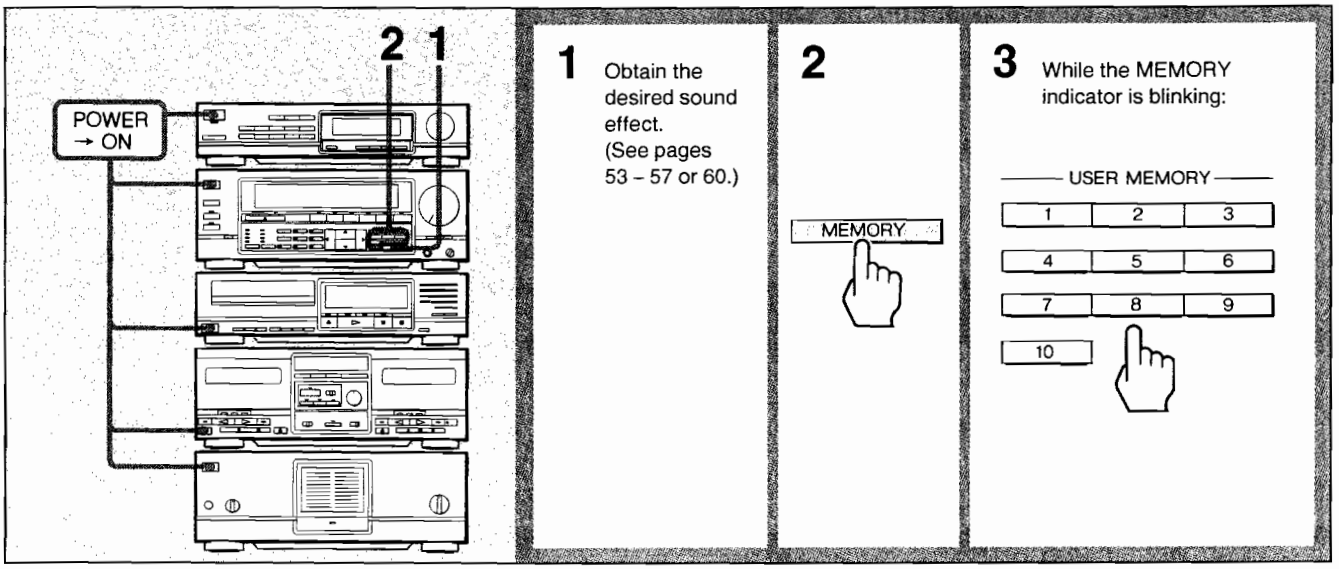
3 Call up the surround/dynamic sound number (0 – 19).



Storing Your Individual Sound Effect Settings – User Memory

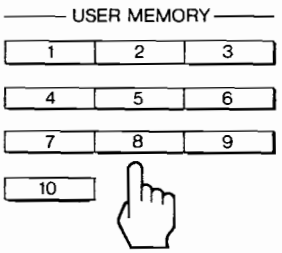
By storing your individual sound effect settings or the digital sound menu settings in the user memory, you can easily call up the settings at any desired time.
You can store up to 10 combinations of settings in the user memory.

When the system is shipped from the factory, 10 specially recommended settings (SELECT 10) from the digital sound menu are stored in the user memory.



At step 2:
The displayed equalizer curve, surround, and dynamic sound settings are stored in the user memory under the pressed button, and the number of the user memory location appears on the display. The settings previously stored at this memory location are erased and replaced by the new settings.

Calling up settings from user memory



Press the button corresponding to the number you wish to recall.

Storing Your Individual Sound Effect Settings – User Memory

Making use of the Digital Sound Menu to generate settings for storing in user memory

1 Call up the Digital Sound Menu settings you wish to utilize (page 60).
2 Modify the equalizer curve (page 53) and/or the surround/dynamic sound (page 55) to match your taste.
3 Store the modified settings in the user memory by following the procedure listed under "Storing Your Individual Sound Effect Settings-User Memory".

The utilized preset memory settings remain stored in preset memory in their original condition.

Storing Digital Sound Menu settings in user memory

1 Call up the Digital Sound Menu you wish to store in user memory. (page 60)
2 Store the settings in the user memory.

How do I restore the contents of the user memory to the initial (SELECT 10) settings?

1 Turn on the power.
2 Press the CLEAR button before the volume indicator stops blinking.

"M COPY" is displayed and the initial 10 sound menu settings are stored in user memory.

Erasing adjustments with a single touch of a button

1

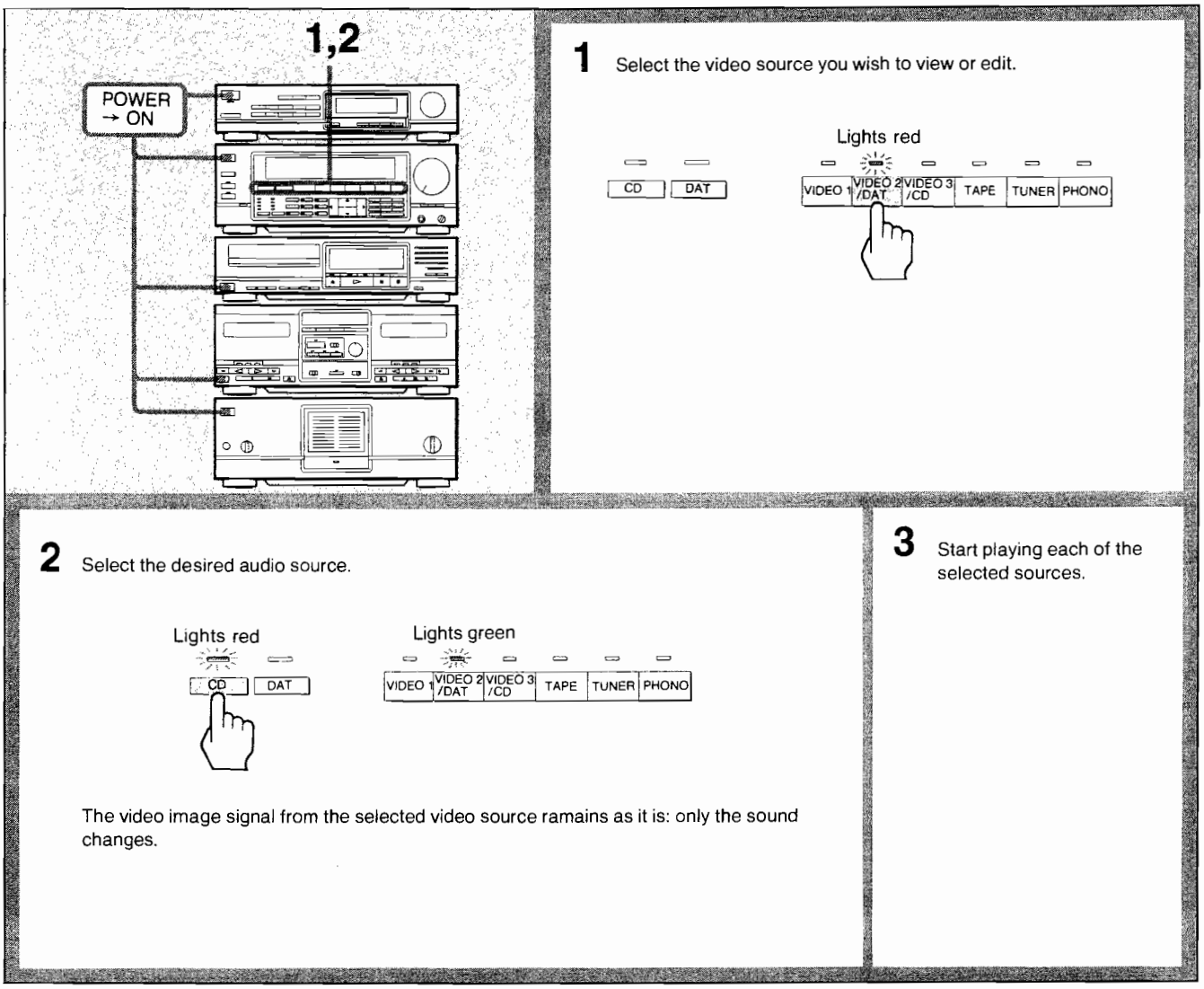
"OK?" appears on the display.

2 Press the CLEAR button again and hold it depressed until "CLEAR" is displayed.

All settings, including the FREQUENCY 1 – 3 positions and the surround reverberation time and level, return to their initial (factory) values. However, the settings stored in user memory remain as they were prior to the clear operation.

Combining Video Images with Sounds from Other Sources and Performing Video Editing

While viewing a video on a VTR connected to this system, you can listen to music from another source such as a CD player or tape deck. You can also record a video image with the sound from another audio source. For example, this function enables you to edit a home-made video by recording music you like as the video's background music. The editing possibilities are limited only by your imagination.



The video image signal from the selected video source ramains as it is: only the sound changes.

To record the selected video and audio signals

Start recording on the VTR connected to the VIDEO 1 jacks. For details on how to operate connected components, refer to the components' instruction manuals.

To dub a videotape

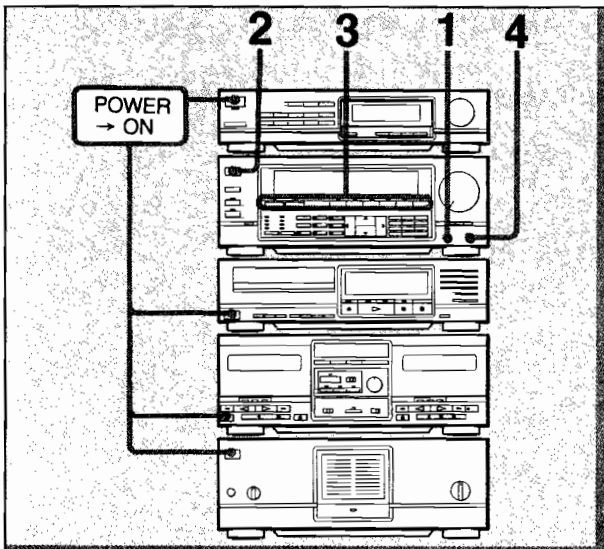
1 Select the VIDEO 2 or VIDEO 3.
2 Start playing the VTR connected to the VIDEO 2/DAT or VIDEO 3/CD jacks.
3 Start recording on the VTR connected to the VIDEO 1 jacks.

Note

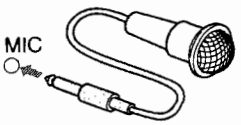
The only VTR that can be used for recording is the VTR connected to the VIDEO 1 jacks.
The VTRs connected to the VIDEO 2/DAT or VIDEO 3/CD jacks cannot be used for recording even if they are operated so as to begin recording.

Microphone Mixing

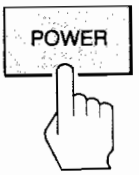
This function allows you to use a microphone to sing along or "mix" your voice with a music source such as a compact disc.



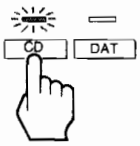
1

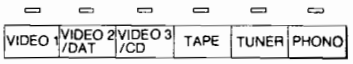


2



3 **Select the desired audio source, start playing the selected source, and begin singing into the microphone.**





4 **Adjust the microphone volume level.**

To adjust the overall volume, turn the VOLUME control.

To record the mixed sound

1 Load a recording tape into deck B.
2 Press the EQUALIZER RECORDING button.*
3 Start recording on deck B (see "Recording" on page 38.)

* It is not possible to adjust the microphone sound using the Digital Parametric Equalizer, the Digital Dynamic Sound, or the Digital Presence Surround.

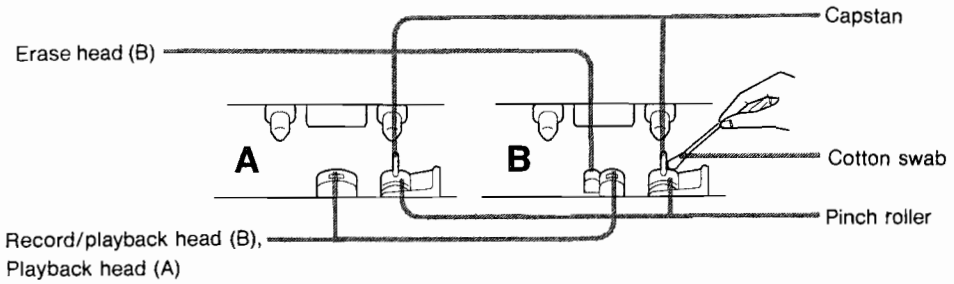
If howling occurs

Turn the MIC LEVEL counterclockwise or separate the microphone away from the speakers.

When the microphone is not being used

Be sure to unplug the microphone from the MIC jack and set the MIC LEVEL control to the MIN position when the microphone is not being used.

Maintenance



Cleaning heads and tape path
Clean after every 10 hours of operation and before recording for optimum record/playback quality.

1 Press ⏏ of both decks A and B.
2 Slightly moisten the tip of a cotton swab with cleaning fluid or alcohol.
3 Wipe heads, pinch roller and capstan.

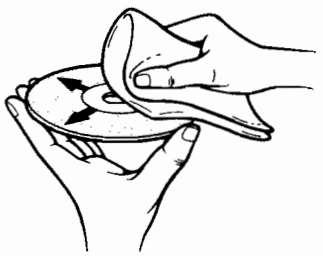
Do not insert cassette until cleaned areas are completely dry.

Demagnetizing the heads
After 20 to 30 hours of use, it is necessary to remove residual magnetism built up on the heads.
Turn off the power and demagnetize the heads with any commercially available demagnetizer.

Cleaning the cabinet
Use a soft cloth slightly moistened with a mild detergent solution.

Cleaning Discs

When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.



Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

Troubleshooting Guide

General

Symptom	Cause (and remedy)
No power	• The power cord is not securely connected.
No audio	• The VOLUME control is set to its minimum level. • The speaker wires are not securely connected. • Check function controls.
No audio from one channel or unbalanced left and right volume.	• A speaker cord is disconnected or its connection is incorrect. • Adjust BALANCE control.
Reversed left and right sound	• Incorrect connection of the speaker cords.

CD Player Operation

Symptom	Cause (and remedy)
Play does not start.	• Dirty disc. Clean the disc. • The disc is inserted upside down. Insert the disc with the printed side up. • Moisture condensation. Leave the player turned on for approximately one hour.

Radio Program Reception

Symptom	Cause (and remedy)
STEREO indication blinks	• The signal strength is too weak. Adjust the location and direction of the antenna. Connect an external antenna if the indicator still blinks.

Cassette Deck Operation

Symptom	Cause (and remedy)
AMS function does not operate correctly.	• Blank sections between tunes are too short. Use the recording muting function to make blank sections of 4 seconds or longer between tunes. • The unit is too close to a TV set.
AMS function starts playback in mid-tune.	• Extremely low-level sound continues for several seconds in the middle of a tune. Fast-forward or rewind the tape using ▶▶ or ◀◀.
When playing a karaoke tape, the AMS function starts playback at the beginning of the vocals section rather than at the beginning of the accompaniment.	• With some karaoke tapes, vocals and accompaniment are recorded independently on the left and right channels. In this case, the AMS function may judge the beginning of the vocals section to be the beginning of the tune. Fast-forward or rewind the tape using ▶▶ or ◀◀.
The cassette compartment cover does not open.	• If ⏏ is pressed to eject a tape immediately after ◀, ▶, or ■ is pressed, the cassette cover may not open. Switch the power off and then switch it back on again to restore normal operation.

Specifications

Tuner (ST-V925E)

System: FM stereo, FM/AM Superheterodyne tuner

FM tuner section

Tuning range: 87.5 to 108 MHz
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz

MW/LW tuner section

	MW	LW
Tuning range	522 to 1,611 kHz (Italian model) 531 to 1,602 kHz (Other European countries)	144 to 288 kHz (Italian model) 153 to 281 kHz (Other European countries)
Antenna	AM loop antenna, External antenna terminal	
Intermediate frequency	450 kHz	

Power consumption: 10 W
AC outlet: 2 unswitched, max. 100 W.
Dimensions: Approx. 355 × 82 × 324 mm (w/h/d) (14 × 3 1/4 × 12 3/4 inches) Incl. projecting parts and controls
Weight: Approx. 2.3 kg (5 lb 2 oz)

Preamplifier (TA-V925EE)

Inputs

	Jack type	Sensitivity	Impedance
PHONO IN	Phono	2.8 mV	50k ohms
TUNER, TAPE, VIDEO 1, VIDEO 2/DAT, VIDEO 3/CD, TAPE IN	Phono	200 mV	50k ohms
MIC	Phone	1 mV	10k ohms

Outputs

	Jack type	Voltage	Impedance
TAPE, DAT, VIDEO 1, VIDEO 2/DAT, LINE/MONITOR	Phono	200 mV	470 ohms

Power comsumption: 20 W
Dimensions: 355 × 132 × 320 mm (w/h/d) (14 × 5 1/5 × 12 3/5 inches)
Weight: Approx. 4.7 kg (10 lb 6 oz)

CD player (CDP-V925E)

Power consumption: 11 W
Dimensions: 355 × 95 × 300 mm (w/h/d) (14 × 3 3/4 × 11 4/5 inches)
Weight: Approx. 3.7 kg (8 lb 3 oz)

Power amplifier (TA-V925NE)

Power output: 85 W + 85 W at 5 % distortion
Power consumption: 150 W
AC outlets: 2 unswitched. 200 W max.
Dimensions: 355 × 132 × 335 mm (w/h/d) (14 × 5 1/5 × 13 1/8 inches)
Weight: Approx. 6.7 kg (14 lb 13 oz)

Cassette deck (TC-V925E)

Recording system: 4-track, 2-channel stereo
Frequency response: DOLBY NR OFF (DIN)
With TYPE IV cassette (SONY METAL-ES) 30 to 15,000 Hz ± 3 dB
With TYPE II cassette (Sony UX-S) 30 to 14,000 Hz ± 3 dB
With TYPE I cassette (Sony HF-S) 30 to 13,000 Hz ±3 dB
Wow and flutter: ± 0.2 % (DIN)
AC outlet: 1 unswitched, max. 100 W
Dimensions: 355 × 133 × 308 mm (w/h/d) (14 × 5 1/4 × 12 1/8 inches) Incl. projecting parts and controls
Weight: Approx. 4.6 kg (10 lb 3 oz)

General

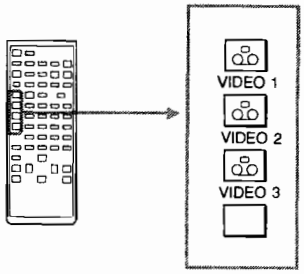
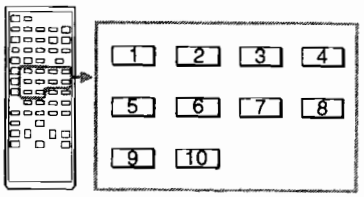
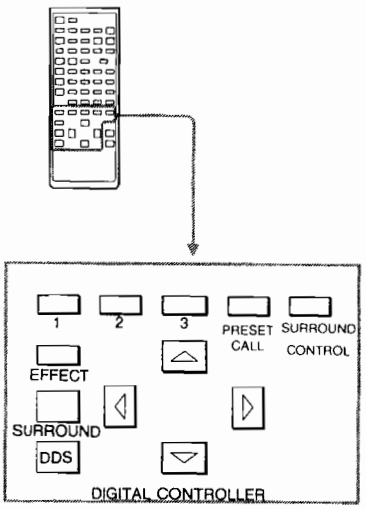
Power requirements: 240 V AC, 50 Hz

Accessories supplied

Remote commander (1)
Batteries Sony SUM-3 (NS) (2)
AM loop antenna (1)
FM wire antenna (1)
Connecting cord (short) (1)
Connecting cord (long) (3)
Flat cord (1)

Design and specifications subject to change without notice.

How to Use the Remote Control Unit (Preamplifier Section)

Position of Operation Buttons	Operation	Button to Press
	Setting the first VTR to operation mode.	Press VIDEO 1
	Setting the second VTR to operation mode.	Press VIDEO 2
	Setting a videodisc player to operation mode.	Press VIDEO 3
	Setting the DAT deck to operation mode.	Press DAT
	Selecting the user memory.	**1** Set TUNER CD AMP to AMP. **2** Select the user memory using the numeric buttons 1 – 10. 1 2 3 4 / 5 6 7 8 / 9 10
	Adjusting the sound using the Digital Parametric Equalizer.	After specifying the desired center frequency by pressing EQUALIZER FREQUENCY, press DIGITAL CONTROLLER to create the equalizer curve.
	Recalling the digital sound menu.	After pressing PRESET CALL, press DIGITAL CONTROLLER to specify the equalizer number and the surround or dynamic sound number.
	Activating the surround effect.	After pressing SURROUND to select the mode and then pressing SURROUND CONTROL, press DIGITAL CONTROLLER to set the reverberation time and level.
	Activating the DDS (Digital Dynamic Sound) effect.	Press DDS to select the mode.
	Turning the equalizer, surround, and DDS (Digital Dynamic Sound) effect ON and OFF.	Press EFFECT If the front panel indicator lights, the effect is ON; if the indicator goes out, the effect is OFF.

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